18

STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2016-17)

SIXTEENTH LOK SABHA

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2017-18)

EIGHTEENTH REPORT

सत्यमेव जयते

LOK SABHA SECRETARIAT
NEW DELHI

March, 2017/ Phalguna, 1938 (Saka)

CP&NG No.

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(SIXTEENTH LOK SABHA)

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2017-18)

Presented to Lok Sabha on 17.03.2017

Laid in Rajya Sabha on 17.03.2017

LOK SABHA SECRETARIAT
NEW DELHI

March, 2017/ Phalguna, 1938 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2016-17)

Sl. No.	Name of Members
	LOK SABHA
	Shri Pralhad Joshi - Chairperson
2	Shri Rajendra Agrawal
3	Shri P. K. Biju
4	Shri Ravneet Singh Bittu
5	Shri Kalikesh N. Singh Deo
6	Smt. Rama Devi
7	Shri V. Elumalai
8	Shri Naranbhai Bhikhabhai Kachhadiya
9	Dr. Thokchom Meinya
10	Smt. Pratima Mondal
11	Shri Ashok Mahadeorao Nete
12	Dr. Ravindra Babu Pandula
13	Smt. Jayshreeben Patel
14	Shri A.T. Nana Patil
15	Shri Arvind Ganpat Sawant
16	Shri Raju Shetti
17	Dr. Bhola Singh (Begusarai)
18	Shri Kamakhya Prasad Tasa
19	Shri Rajesh Verma
20	Shri Om Prakash Yadav
21	Shri Laxmi Narayan Yadav
	RAJYA SABHA
22	Shri Om Prakash Mathur
23	Shri Bhubaneshwar Kalita
24	Smt. Ranee Narah
25	Shri Dilipbhai Pandya
26	Shri Ahmed Patel
27	Shri V. Lakshmikantha Rao
28	Shri V. Vijayasai Reddy
29	Chaudhary Munvvar Saleem
30	Mahant Shambhuprasadji B. Tundiya
31	Shri A. Vijayakumar

SECRETARIAT

1	Shri A.K.Singh	Additional Secretary
2	Dr. Ram Raj Rai	Director
3	Shri H. Ram Prakash	Additional Director
4	Shri Sujay Kumar	Under Secretary

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 Eighteenth Report on 'Demands for Grants (2017-18) of the Ministry of Petroleum & Natural Gas'.

2. The Committee examined the Demands for Grants (2017-18) pertaining to the Ministry of Petroleum & Natural Gas which were laid on the Table of the House on 08.02.2017.

3. The Committee took evidence of the representatives of the Ministry of Petroleum & Natural Gas at their sitting held on 21.02.2017. The Committee further took evidence of the representatives of the Ministry of Finance (Deptt. of Revenue) and the Ministry of Petroleum & Natural Gas at their sittings held on 01.03.2017. The Committee considered and adopted the Report at their sitting held on 15.03.2017.

4. The Committee wish to express their thanks to the representatives of the Ministry of Petroleum and Natural Gas and Ministry of Finance (Deptt. of Revenue) for furnishing the material and information in connection with the examination of Demands for Grants (2017-18) of the Ministry and for giving evidence before the Committee.

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;
16 March, 2017
25 Phalguna,1938 (Saka)

PRALHAD JOSHI,,
Chairperson,
Standing Committee on
Petroleum & Natural Gas.

REPORT

PART - I

INTRODUCTORY

Energy is a key driver of economic growth. Adequate, efficient, reliable and affordable energy is essential for the sustainable development and inclusive growth of the overall economy of India. India is at present the fastest growing large economy of the world. The growth in GDP was at 7.6% during 2015-16 and 7.1% and 7.3% in the Q1 and Q2 of 2016-17 respectively. Due to rapid economic expansion, India has become world's fastest growing energy market. India surpassed Russia to become the 3rd largest energy consumer in the world after China and USA during 2015. Oil & Gas account for around 35 percent share in India's energy consumption. In fact, India surpassed Japan to become 3rd largest oil consumer in the world after US and China during 2015. Given India's growing energy demands, reliance on imports and limited domestic fossil fuel resources, the country has ambitious plans to increase domestic oil & gas production and exploit all possible forms of the energy to the fullest. With the aim of promoting energy security of the Country, Hon'ble Prime Minister has urged all stakeholders to increase the domestic production of Oil and Gas to reduce import dependence from 77% to 67% by the year 2022.

ENSURING ENERGY SECURITY

1.2 India's energy security is primarily about ensuring continuous availability of commercial energy at competitive prices to support its economic growth and meet the energy needs of households with safe, clean and affordable forms of energy. Keeping in view the vast and ever increasing energy requirements of the economy, several initiatives have been taken for increasing production and exploitation of all domestic petroleum resources.

MANDATE OF MINISTRY

1.3 The Ministry of Petroleum and Natural Gas is concerned with exploration and production of Oil and Natural Gas refining, distribution and marketing, import and export

and conservation of petroleum products. The work allocated to the Ministry is given in Appendix I. The names of the Central Public Sector Enterprises and other organisations under the Ministry are listed in Appendix II.

A. BUDGETARY ALLOCATIONS

1.4 Total budget allocated to the Ministry of Petroleum and Natural Gas during 2017-18 is Rs. 29,157.57 crore. Provisions in BE 2016-17 and RE 2016-17 are Rs. 30,160.62 crore and Rs. 30,241.76 crore respectively. Expenditure made during the first three quarters of 2016-17 is Rs. 22600.91 crore.

1.5 A significant reform initiative in the budgeting process announced by the Finance Minister, in his budget speech of 2016-17, was the removal of the Plan and non- Plan distinction in expenditure budgeting. This has been implemented from the Budget of 2017-18. Accordingly provisions have been made in Revenue and Capital sections of the Grant.

1.6 Scheme wise details (Actual 2015-16, BE/RE 2016-17, Expenditure made during the first three quarters of 2016-17 and BE 2017-18) are given in a Statement given below:

Details of Actual 2015-16, BE 2016-17, Actual till Dec. 2016, RE 2016-17 and BE 2017-18

MINISTRY OF PETROLEUM & NATURAL GAS

(Rs. in crore)

	Actual 2015-16		BE 2016-17		Actual till Dec, 2016		RE 2016-17		BE- 2017-18	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Revenue	Capital
Centre's Expenditure										
I. Establishment Expenditure										
Secretariat Economic Service	**0.00**	**24.81**	**0.00**	**28.30**	**0.00**	**22.34**	**0.00**	**28.10**	**30.99**	**0.00**
II. Central Sector Schemes										
1.DBT for LPG	0.00	21140.00	0.00	17020.04	0.00	10224.25	0.00	13000.00	13097.13	0.00
2. Other subsidy payable including NE Region(LPG)	0.00	1320.00	0.00	2742.75	0.00	2742.75	0.00	3178.00	454.00	0.00
3. Project Management Expenditure	0.00	200.00	0.00	40.00	0.00	0.00	0.00	0.00	25.00	0.00
4.DBT for Kerosene	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.01	150.00	0.00
5. Other subsidy payable including NE Region(SKO)	0.00	7339.00	0.00	7094.21	0.00	7094.21	0.00	8770.70	8661.87	0.00
6.LPG connection to Poor Households (PMUY)	0.00	0.00	2000.00	0.00	1436.03	0.00	2500.00	0.00	2500.00	0.00
7.ISPRL (crude filling) Phase-I	1153.00	0.00	1001.00	0.00	1000.00	0.00	2001.00	0.00	0.00	2499.00
8.ISPRL (construction of caverns)Phase-II	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

9.ISPRL (O&M expenses)	**0.00**	**6.86**	**0.00**	**1.00**	**0.00**	**0.00**	**0.00**	**45.00**	**79.00**	**0.00**
10.Phulpur-Dhamra-Haldia Pipeline Project (PDHPL)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**450.00**	**0.00**	**0.00**	**1200.00**
III. Other Central Expenditure										
1.PNGRB	**0.00**	**16.40**	**0.00**	**16.51**	**0.00**	**10.52**	**0.00**	**15.23**	**18.34**	**0.00**
2.SFPL	**0.00**	**2.04**	**0.00**	**2.10**	**0.00**	**0.00**	**0.00**	**1.72**	**2.69**	**0.00**
3.RGIPT	**48.00**	**0.00**	**47.00**	**0.00**	**47.00**	**0.00**	**100.00**	**0.00**	**135.10**	**0.00**
4. Centre of Excellence for Energy, Assam	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**
5. Centre of Excellence for Energy, Bangalore	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**
6. IIPE Visakhapatnam	**0.00**	**0.00**	**1.00**	**1.00**	**0.00**	**0.00**	**31.00**	**1.00**	**0.00**	**145.20**
B. Transfers to States										
IV. Centrally Sponsored Schemes										
V. Finance Commission Transfers										
VI. Other Transfers to States										
1. Grant in Aid to State Govts. for establishment of institutional mechanism for direct transfer of subsidy in cash for PDS Kerosene beneficiaries	**0.00**	**0.00**	**0.00**	**1.00**	**0.00**	**0.00**	**0.00**	**1.00**	**4.00**	**0.00**
2. Grant in Aid to U.T. Govts. for establishment of institutional mechanism for direct transfer of subsidy in cash for PDS Kerosene beneficiaries	**0.00**	**0.00**	**0.00**	**1.00**	**0.00**	**0.00**	**0.00**	**1.00**	**1.00**	**0.00**
3. Cash incentive to State Govts. for Kerosene Distribution Reforms	**0.00**	**0.00**	**0.00**	**50.00**	**0.00**	**23.81**	**0.00**	**80.00**	**105.00**	**0.00**
4. Cash incentive to U.T. Govts. for Kerosene Distribution Reforms	**0.00**	**0.00**	**0.00**	**1.00**	**0.00**	**0.00**	**0.00**	**1.00**	**2.00**	**0.00**
5.Payment of Differential Royalty to State Governments	**0.00**	**36.26**	**0.00**	**61.71**	**0.00**	**0.00**	**0.00**	**37.00**	**44.25**	**0.00**
Total:	**1201.00**	**30085.37**	**3050.00**	**27110.62**	**2483.03**	**20117.88**	**5082.00**	**25159.76**	**25310.37**	**3847.20**

B. CENTRAL SECTOR SCHEMES

Some of the important Central Sector Schemes pertaining to MoPNG are discussed below:

(i) INDIAN STRATEGIC PETROLEUM RESERVES LIMITED (ISPRL)

1.7 The Government, through Indian Strategic Petroleum Reserves Limited (ISPRL), has constructed Strategic Crude Oil Reserves with storage capacity of 5.33 MMT at three locations viz. Visakhapatnam, Mangalore and Padur. The Vishakhapatnam cavern has been commissioned by filling with crude oil and nearly one half of the Mangalore storage facility has also been filled with crude oil. The storage facility at Padur could not be commissioned due to non-completion of a small portion of pipeline and 110 KV powerline on account of an ongoing litigation.

1.8 On being asked about the current status of phase-I of the building of strategic caverns in Visakhapatnam, Mangalore and Padur and funds allocated during the year 2017-18 along with the figures of BE and RE and actuals for the previous two years, i.e., 2015-16 and 2016-17, the Ministry have furnished the following details:

> "Under Strategic Petroleum Reserve (SPR) project Phase-I, underground rock caverns for storage of 5.33 MMT of crude oil at three locations, viz. Vishakhapatnam (1.33 MMT), Mangalore (1.50 MMT) and Padur (2.5 MMT) have been created. The cavern storage facility at Visakhapatnam has been commissioned. The 1.03 MMT strategic Storage compartment has been filled with crude oil. The second 0.3 MMT compartment is being used regularly by HPCL for their refinery operations. The cavern storage facility at Mangalore has also been commissioned. One of the two caverns at Mangalore has been filled with crude oil (0.82 MMT) through funds allocated under GBS. On 25 January 2017, ISPRL signed a Definitive Agreement on Oil Storage and Management with Abu Dhabi National Oil Company (ADNOC) for filling the other cavern with a capacity of 0.81 MMT. The storage facility at Padur has also been completed and tested. However, the facility has not yet been commissioned as out of the 35.8 KMs of the pipeline connecting the Padur caverns, 33.71 kms has been completed and remaining is expected to be completed by later this year. The pipeline has been delayed due to issues relating to land acquisition and pending cases in this regard. A decision regarding the incomplete portion of the 110 KV HT electrical cable has already been issued by the district authorities in Udupi and the cable will be completed soon.
>
> For construction of the strategic storages no funds were provided by the Government. The funds were provided by the Oil Industry Development Board (OIDB) through equity. An expenditure of Rs 4098.35 cr has already been incurred on creating Strategic Petroleum Reserve facilities at Vishakhapatnam, Mangalore and Padur. For filling of crude oil in the storages, the government has provided funds and the details are as below:

Heads	BE (2015 – 16)	RE (2015 – 16)	Actual Expenditure (2015-16)	BE (2016 – 17)	RE (2016 – 17)	Actual Expenditure (2016-17)	BE (2017-18)
4802 (for procurement of crude oil)	1	1153	1153	1001	2001	So far, Rs 1000 cr has been received of end Dec 2016, and remaining yet to be received.	2499
2802 (O & M of the facilities)	00	47	6.86	1	45	Yet to be received.	79

1.9 When asked to furnish a note on the Phase-II of the strategic caverns with all the relevant details such as storage capacity, estimated costs and timelines, the Ministry have provided the following information:

"ISPRL was entrusted with the responsibility of preparing Detailed Project Reports (DPRs) for 12.5 MMT of Strategic Storage of Crude oil in Phase-II at four locations. The locations identified were Chandikhol (3.75 MMT), Bikaner (3.75 MMT), Rajkot (2.5 MMT) and Padur (2.5MMT). The DFRs were prepared and based on these MoP&NG moved a proposal for the consideration of the Expenditure Finance Committee (EFC).

The proposal for Phase II projects was considered by the Expenditure Finance Committee on 29th July 2016. After detailed deliberations only two of the four locations were recommended by EFC. The locations, the storage capacity, the estimated costs and the estimated time line for project completion, are given in the table below:

Location	**Storage Type**	**Storage Capacity in MMT**	**Estimated cost in Rs crore**	**Project Time line in months**
Chandikhol in Odisha	underground rock caverns	4.4	4947	64
Bikaner in Rajasthan	salt leached caverns	5.6	4169	96
Total		10.0	9116	

The EFC has also recommended that the above funds would be met through Oil Industry Cess, passed on to ISPRL as Capital Grant. For the operation and maintenance (O&M) of the two locations EFC has recommended Rs 103 Crores. The O&M expenses would be provided by OIDB from its internal accruals".

1.10 When asked to furnish a note on various models of financing of for filling of crude oil in the strategic storage caverns, the Ministry have replied as under:

"Presently, the Strategic Petroleum Reserve (SPR) facilities at Vishakhapatnam and one of the two caverns at Mangalore SPR facility have been filled up by the PSU OMCs. The cost of filling is reimbursed by the Government of India through the GBS.

ISPRL is in negotiations with Abu Dhabi National Oil Company (ADNOC) for filling the other cavern with a capacity of 0.81 MMT.

ISPRL had got a study done through SBI Caps. As incentives to investors in the filling of crude oil in SPR facilities, Government of India and State Government of Karnataka have granted certain tax exemptions. In order to formulate a viable commercial model in filling up of Padur SPR facility, a Preliminary Expression of Interest (PEOI) was floated by ISPRL with last date for submission of proposal as end December 2016. It has received responses from six companies, including from two domestic oil marketing companies. The offers are being evaluated by ISPRL".

1.11 The Committee have noted that the total allocation for strategic oil reserves was significantly enhanced from Rs. 3 crores to Rs. 2046.00 crores at RE 2016-17 stage. In this regard, when enquired about the actual expenditure made for the purpose along with the break-up of work undertaken with the enhanced allocation, the Ministry have provided the following details:

> "Vishakhapatanam crude oil storage facility has been filled through HPCL and IOCL at a cost of Rs 2528.05 cr. Of this, Rs 1153 cr was paid last year and Rs 1000 cr has been paid during this year out of the first supplementary grant and Rs 375.05 is to be reimbursed to the two companies. One of the two caverns of Mangalore has also been filled up through BPCL and MRPL at an estimated cost of Rs 1,737 cr. The total reimbursable amount, therefore, is Rs 2112 cr. Of the allocated amount of Rs 2046 cr, Rs 1000 cr has been utilized and the remaining Rs 1001 cr will be utilized for reimbursing the PSUs as mentioned above, and Rs 45 cr will be utilized towards meeting Operational and Maintenance (O&M) costs".

1.12 When specifically asked as to what will be the model for procurement of crude oil for filling up of the proposed new caverns, the Ministry have stated as under:

> "There are three models, i) at Vishakhapatnam and half of Mangalore storage, the crude has been filled utilizing funds received from GoI under the GBS, ii) the second half of Mangalore storage is proposed to be filled by Abu Dhabi National Oil Company (ADNOC) of UAE on a mutually agreed commercial model. In this regards, a definitive agreement on storage and management of crude was signed between ISPRL and ADNOC on 25 January 2017, and iii) In order to formulate a viable commercial model in filling up of Padur facility, a Preliminary Expression of Interest (PEOI) was floated by ISPRL with last date for submission of proposal as end December 2016. It has received responses from six companies, including from overseas companies and institutions".

1.13 When asked as to whether the Ministry has consulted various agencies before finalising the location to set up two more strategic storage caverns in Bikaner (Rajasthan) and Chandikhole (Odisha), the Ministry have provided the following reply:

> "In the proposed facility north of Bikaner, crude oil will be stored in underground salt leached caverns. These caverns are created within the thick salt deposits. The salt deposits are more than 500 meters deep and the depth of the cavern is determined by the depth of the salt layer. Thus the salt caverns will be more than 500 meters below the surface. Thus the crude storages, per say, are protected against attacks.

Inter ministerial consultations were held before the Bikaner project was recommended by EFC. The Ministries included MEA, NSCS, MoS&PI, MoF, MoD and NITI Aayog. No objections were raised by these participant Ministries with respect to the closeness of the facility to the Border.

The Bikaner facility will be connected with the crude oil pipelines feeding HMEL (Hindustan Mittal Energy Ltd) at Bhatinda, as well as the Panipat and Mathura Refineries. The distance of the cavern from the tap of point at Kandla to HMEL pipeline is 140 km from the tap of point at Kandla to Panipat/Mathura pipeline is 240 km making the location ideal to supply to 3 major refineries in the north India".

(ii) PRADHAN MANTRI UJJAWALA YOJANA (PMUY)

1.14 Pradhan Mantri Ujjawala Yojana was launched in 2016-17 to provide energy security to rural households. Government has approved Rs. 8000 crore under the Pradhan Mantri Ujjwala Yojana (PMUY) for release of 5 crore deposit free new LPG connections to Women of BPL families over three years, i.e. FY 2016-17, 2017-18 and 2018-19. BE for the scheme was Rs. 2000 crore for this year which has been enhanced to Rs. 2500 crore at RE stage. The scheme will provide an initial cost of Rs. 1600/- for providing LPG connection to poor households in the name of women of the household. The Prime Minister launched the scheme on 01.05.2016 at Balia, Uttar Pradesh. As on 13.12.2016, 1,26,67,567 new LPG connections have been released under PMUY covering 647 districts.

1.15 On being asked about the year-wise targets set for providing LPG connections to BPL families under the Pradhan Mantri Ujjawala Yojana (PMUY) scheme along with state wise details of the distribution of total number of LPG connections till December, 2017, the Ministry have provided the following factual details:

"The Government has fixed target to release 5 crore new LPG connections under “Pradhan Mantri Ujjwala Yojana” (PMUY) over a period of 3 years starting from Financial Year 2016-17. Year-wise targets are as under:

Financial Year	Target (in crore)
2016-17	1.5
2017-18	1.5
2018-19	2.0

Details of States/UTs-wise LPG connections released under PMUY Scheme as on 31.12.2016 are given below:

Sr. No.	State/UT	connections released
1	Andaman and Nicobar Islands	475
2	Andhra pradesh	27,834
3	Arunachal Pradesh	-
4	Assam	2
5	Bihar	19,06,861
6	Chandigarh	-
7	Chhattisgarh	6,26,162
8	Dadra and Nagar Haveli	1,273
9	Daman and Diu	41
10	Delhi	319
11	Goa	881
12	Gujarat	6,12,513
13	Haryana	2,37,176
14	Himachal Pradesh	1,490
15	Jammu and Kashmir	1,79,682
16	Jharkhand	1,58,612
17	Karnataka	15,819
18	Kerala	7,446
19	Madhya Pradesh	17,19,521
20	Maharashtra	4,54,801
21	Manipur	7
22	Meghalaya	-
23	Mizoram	-
24	Nagaland	-
25	Odisha	7,38,673
26	Puducherry	416
27	Punjab	2,00,723
28	Rajasthan	14,65,977
29	Sikkim	-
30	Tamil Nadu	1,81,134
31	Telangana	33
32	Tripura	-
33	Uttar Pradesh	47,07,924
34	Uttarakhand	83,362
35	West Bengal	19,59,679
	Total	**152,88,836**

1.16 With regard to details of funds allocated under PMUY scheme along with the purposes for which funds have been utilized by OMCs, the Ministry have submitted as under:

> "OMCs, initially bear the cost of release of new connections under PMUY out of their own available fund and subsequently, make their claim for reimbursement with the Ministry. Ministry reimburses the claimed amount after due verification.
>
> During Financial Year 2016-17, Rs. 2000 crore was allotted for release of 1.5 crore connections under PMUY and of which Rs. 1768 crore (claim made upto 30.11.2016) has been reimbursed to OMCs. At RE state the allocation has been enhanced to Rs. 2500 crore.
>
> Further, Rs. 2500 crore has been allocated for Financial Year 2017-18".

1.17 When asked to cite the reasons for increasing allocation under 'The Scheme for LPG Connections to Poor Households' by Rs 500 crores in BE 2017-18, the Ministry have submitted as under:

> "The Government had targeted to release 1.5 crore new LPG connections to the women member of a BPL family under PMUY scheme during financial year 2016-17. Against the requirement of Rs. 2400 crore to release 1.5 crore connections, BE 2016-17 provided only Rs. 2000 crore. Keeping in view the pace of release of new LPG connections under the Scheme, this Ministry had requested to revise the amount in RE 2016-17 to the tune of Rs. 3200 crore to release 2 crore new LPG connections. However, under the RE 2016-17, the allocation was revised to Rs. 2500 crore only. As on 15.02.2017, more than 1.70 crore new LPG connections have been released under the Scheme".

(iii) <u>DIRECT TRANSFER OF CASH SUBSIDY FOR KEROSENE (DTCK)</u>

1.18 Asked to furnish the current status of the DTCK scheme and the response of the beneficiaries in the states where it is being implemented, the Ministry in its written reply submitted as under:

> "Jharkhand has become first State in the country to implement DBTK and others States/UTs have been requested to join the Scheme but the response from other Stats/UTs is awaited. Governments of Karnataka, Haryana and Telangana have taken voluntary cut in their PDS SKO allocation from Financial Year 2016-17. Entire State of Haryana will become Kerosene-free from 01.04.2017 onwards. No adverse comments in electronic/print media have been reported in the state where the Scheme is under implementation nor the State Government/Oil Marketing Companies reported any difficulty in implementing the Scheme so far".

1.19 When the Committee pointed out that allocation for direct benefit transfer for 2016-17 was made as Rs. 50 crores which was reduced at RE 2016-17 stage to Rs. 0.01 crore only and in BE 2017-18 allocation for this purpose kept at Rs. 150 crores and asked the Ministry justify such trend of allocation and expenditure, the Ministry submitted the following:

> "BE for 2016-17 for DBT of Kerosene was Rs. 50 crore. Since, the Scheme has been implemented in four Districts of the State of Jharkhand. As no amount could be spent at the RE stage, Rs. 0.01 crore has been allocated for this purpose.
>
> All State Governments have been requested to join the scheme and it is expected that during the financial year 2017-18 some more States may join the scheme. Hence, budget allocation for BE 2017-18 has been kept at Rs. 150 crore".

1.20 Details of states which have opted for voluntary cut in quota for subsidised Kerosene in 2016-17 and cash incentive released/to be releases is as under:

S.No.	State	Cash Incentive
1.	Karnataka	Rs.45,35,06,420/- (1st & 2nd Quarter of FY 2016-17)
2.	Haryana	Rs. 7,21,78,500/- (1st & 2nd Quarter of FY 2016-17)
3.	Telangana	Rs. 8,80,72,830/- (1st & 2nd Quarter of FY 2016-17)

(iv) DBT FOR LPG

1.21 When asked to furnish state-wise details of consumers/beneficiaries for the last three years under DBT scheme for LPG and kerosene, the Ministry have submitted the following details:

> "State/UT-wise details of LPG consumers, joined DBT for LPG as on 30.06.2015, 01.07.2016 and 01.02.2017 are as under:

State/UT-wise details of LPG consumers joined DBTL Scheme			
State Name	**CTC as on 30.06.2015**	**CTC as on 01.07.2016**	**CTC as on 01.02.2017**
Andaman and Nicobar Islands	51449	59962	64383
Andhra Pradesh	8735753	10200530	10787692
Arunachal Pradesh	140576	156140	161766
Assam	2323015	2695044	2861956
Bihar	5062273	6476337	7771913
Chandigarh	229640	242239	244731
Chhattisgarh	1447734	1804128	2446823
Dadra and Nagar Haveli	56343	60906	57613
Daman and Diu	50347	53303	48582
Delhi	3528186	3805355	3720843
Goa	376147	385606	383139

Gujarat	5548392	6133148	6267738
Haryana	3827417	4329621	4626356
Himachal Pradesh	1088727	1205006	1246211
Jammu and Kashmir	1200204	1421775	1625168
Jharkhand	1454119	1755681	1982439
Karnataka	8666971	9868626	9767525
Kerala	6740017	7125138	7200822
Lakshadweep	3536	3737	3870
Madhya Pradesh	5561043	6563651	7648905
Maharashtra	16242801	17880206	17867768
Manipur	225192	295945	276561
Meghalaya	111215	123904	129795
Mizoram	164511	190545	204812
Nagaland	111731	130392	134337
Odisha	2316343	3096407	3520000
Puducherry	297672	311779	316527
Punjab	5113273	5764557	6042721
Rajasthan	7044121	8415002	9019870
Sikkim	96182	106078	108053
Tamil Nadu	14090699	15477544	15276143
Telangana	6608528	7716205	6320634
Tripura	321888	401199	422663
Uttar Pradesh	15460034	19540301	22064662
Uttarakhand	1560069	1778441	1786758
West Bengal	8886967	10791601	12005314
Grand Total	**134743115**	**156366039**	**164415093**

DBTK in Kerosene has been implemented in 4 districts of Jharkhand w.e.f. 1st October, 2016 and 4.12 lakh consumers have uplifted kerosene on non-subsidized rates under DBTK Scheme".

1.22 When asked as to what has been the total expenditure incurred on DBT for LPG and Kerosene during the last three years along with estimates in the financial year 2017-18, the Ministry have submitted the following factual information:

"Total expenditure incurred on DBT for LPG and Kerosene during the last three years along with estimates in the financial year 2017-18 are given below:-

(Rs. in crore)

Particulars	2013-14	2014-15	2015-16	BE 2016-17	RE 2016-17	BE-2017-18
Subsidy on LPG (including DBTL)	52290	40569	22061	21802.79	18678.00	16076.13
PDS Kerosene	30574	24799	11496	7197.21	8853.71	8923.87

1.23 On being asked about the quantum of savings for the Government during the financial year 2016-17 (till date), the Ministry have provided the following information:

"On account of implementation of DBTL (PAHAL), Scheme 3.47 crore duplicate/inactive/ghost LPG consumers have been blocked. Hence, estimated subsidy savings for the year 2016-17 (till 31st January 2017) is approximately

Rs.2642 crore assuming that consumer will consume 10 cylinders per annum at an average subsidy rate of Rs. 76.14 per cylinder for the year 2016-17 upto 31st Jan, 2017".

(v) RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY (RGIPT)

1.24 When asked as to how much funds have been provided for RGIPT in the budget during the financial year 2017-18, the Ministry have stated as under:

"Rs.135.10 crore for the Jais Campus of RGIPT and Rs.1.00 crore for RGIPT Centre at Sivasagar, Assam have been allocated in BE 2017-18".

1.25 On being asked to furnish an update on the progress of construction of the campus at Rai Barelli along with the expected timeline for completion of the same, the Ministry have stated as under:

"The construction of permanent campus at Jais, district Amethi, Uttar Pradesh has been completed except construction of residence for the Director, RGIPT, field and track and workshop. The campus was inaugurated by Hon'ble MoS (IC) MoPNG in the presence of Hon'ble Minister of HRD and Hon'ble Minister of Textiles on 22/10/2016. The Institute has been functioning from this new premises since then.

Out of total amount from GBS under Capital expenditure of Rs 369.10 crore an amount of Rs. 181 crore has been released. Out of remaining amount of Rs. 188.10 crore, Rs. 53 crore has been provided under RE 2016-17. The remaining amount of Rs. 135.10 crore has been allocated in BE 2017-18 for the above mentioned remaining construction and for procurement of furniture and equipments and payment to contractors against the pending liabilities".

1.26 When asked to furnish a status update on the RGIPT project at Sibsagar, Assam, the Ministry have stated as under:

"The foundation stone for RGIPT, Assam Centre at Sivasagar was laid by the then Hon'ble Prime Minister in February, 2011. This Centre has been proposed to cater to the requirements of blue-collar technicians for upstream area to meet the current gap in skilled set and to meet the anticipated demand for exploration sector. In addition, the Institute would also offer diploma / degree courses related to the petroleum sector students.

Government of Assam has allotted 100 acres of land at Sivasagar. As the allotted land is in a low-lying, it required considerable earth filling and piling before commencement of construction activities. This earth-filling and piling work has since been completed in April, 2014. The work was further delayed due to

change of Project Management Consultant from EIL (due to poor performance the contract was terminated in September, 2013) and thereafter awarded to CPWD.

The project cost is estimated to be Rs. 422 crore including capital expenditure of Rs. 235 crore and Rs. 182 crore as Endowment Fund and Rs. 5 crore as preliminary expenditure. Initially, the capital expenditure was to be borne by OIDB and six Oil PSUs having their functioning in North East in the ratio of 65:35 basis.

A 4-member committee has now been constituted by MoPNG to submit the report on funding pattern, whether from Oil PSUs / OIDB or GBS, and on the autonomous status if required for the Institute.

The temporary campus meanwhile has been decided to be set up at Sivasagar to start the academic session 2017-18 and the work for setting up of same is on".

(vi) <u>INDIAN INSTITUTE OF PETROLEUM AND ENERGY (IIPE)</u>

1.27 When enquired about the details regarding total amount of funds that have been budgeted during 2017-18 for setting up of the petroleum university in Andhra Pradesh, the Ministry have submitted the following information:

"EFC meeting for setting up of Indian Institute of Petroleum and Energy (IIPE) at Vishakapatnam, Andhra Pradesh was held on 21/06/2016. EFC has recommended the total budget of Rs. 655.46 crore as capital expenditure for setting up of Institute from year 2016-17 to 2022-23. In addition, Endowment Fund of Rs 400 crore (Rs 200 crore from GBS and Rs 200 crore from Oil PSUs) has been approved to be given over three years from 2016-17 to 2018-19. Under RE 2016-17, an amount of Rs 32 crore has been allocated under capital expenditure from GBS out of the yearly proposed expenditure of Rs 196.19 crore for capital expenditure and Rs 66.66 crore for contribution towards Endowment Fund. Oil PSUs have already been requested to contribute Rs 200 crore as their share in the Endowment Fund, during this year. During 2017-18, amount requested from GBS was Rs 366.08 crore (Rs 133.23 crore for Capital Expenditure + Rs 66.66 crore as Endowment Fund + Rs 166.19 crore as remaining amount of 2016-17). However, a provision of only Rs. 145.20 crore has been made in BE 2017-18 for IIPE, Visakhapatnam. As it required a new legislation, which is under process".

1.28 On being asked to furnish details regarding total expenditure that has been allocated and incurred on the project during last three years, the Ministry have provided the following details:

"During 2013-14, there was no allocation of budget for IIPE. During 2014-15 and 2015-16 a token amount of Rs. one crore has been allocated for IIPE. There

was no expenditure incurred during these two years. In BE 2016-17, Rs. 2 crore (one crore each under Plan and non-Plan head) has been allocated. Under RE 2016-17, Rs. 32 crore has been allocated for IIPE under Capital Expenditure".

1.29 When asked about the current status of completion of the Petroleum University in Andhra Pradesh along with details of original time-lines and cost estimates and also with revised time-lines and cost estimates and also reasons for delay, the Ministry have provided the following details:

"As mandated under 13th Schedule of Andhra Pradesh Reorganisation Act, 2014, Ministry of Petroleum and Natural Gas has set up Indian Institute of Petroleum and Energy (IIPE) at Visakhapatnam in Andhra Pradesh with the objective to meet the quantitative and qualitative gap in the supply of skilled manpower for the petroleum sector and to promote research activities needed for the growth of the sector. The Government of Andhra Pradesh has made available an area measuring about 200 acres of land at Vangali Village, Sabbavaram Mandal, Visakhapatnam district for the Institute free cost. IIPE Society has been registered on 18.04.2016. CMD, HPCL has been nominated as a President of the Society.

Temporary campus has been set up at the space provided by the College of Engineering (autonomous) in Andhra University at Visakhapatnam to start the academic sessions 2016-17 in two under graduate Programmes, viz., Petroleum Engineering and Chemical Engineering. From the rank list obtained from JEE Advanced, 2016 from IIT-Guwahati, 94 students have been admitted in these two courses. IIT-Kharagpur has been roped in to act as a Mentor Institution for starting the academic session 2016-17. On the request of the Ministry, OIDB has provided an amount of Rs. 23.50 crore for the operational cost.

Foundation Stone of the Institute at the permanent Campus was laid by the Hon'ble MoS (IC), PNG on 20.10.2016 in the presence of Hon'ble Minister of Urban Development, Housing & Urban Poverty Alleviation and Information & Broadcasting, Hon'ble Minister of Civil Aviation, Hon'ble MoS (Science and Technology), Hon'ble Chief Minister of Andhra Pradesh and other dignitaries.

The meeting of Expenditure Finance Committee (EFC) held on 21.06.2016, inter-alia, recommended Rs. 655.46 crore as capital expenditure and Rs. 400 crore as endowment fund (Rs. 200 crore from GBS and Rs. 200 crore from Oil PSUs). As appraised by EFC, the year wise capital expenditure and Endowment Fund for IIPE with break up is as below:-

Capital expenditure for IIPE

Year	Rs in crore
2016-17	196.19
2017-18	133.23
2018-19	101.96

2019-20	92.32
2020-21	71.64
2021-22	55.96
2022-23	4.16
Total	655.46

Endowment Fund (GBS)

Year	Rs in crore
2016-17	66.66
2017-18	66.66
2018-19	66.68
Total	200

Under RE 2016-17, an amount of Rs 32 crore has been allocated under capital head out of the proposed expenditure of Rs 196.19 crore for 2016-17 for capital expenditure and Rs 66.66 crore for Endowment Fund. For the FY 2017-18, against the request of Rs 366.08 crore (Rs 133.23 crore for capital expenditure + Rs 66.66 crore as Endowment Fund + Rs 166.19 crore as remaining amount of 2016-17), only Rs. 145.20 crore has been provided in the BE. Cabinet Note for setting up of IIPE is under process".

During the oral evidence, the Secretary submitted the following about the establishment of IIPE:

"One of the hon. Members mentioned about IIPE and Shiv Sagar, RGIPT Centre. For IIPE Centre, a token allocation is there. We are going to the Cabinet. As soon as the Cabinet approves, additional fund allocation will be given by the Finance Ministry because it involves legislation also. It is an institute of national importance. Once the Bill is approved by the Cabinet, we will go to Parliament. As soon as the Cabinet approves it, the funding part will be done. The legislation would be basically necessary for giving degrees. Otherwise, it cannot be declared as an institute of national importance and will be giving diplomas only".

(vii) <u>CENTRES OF EXCELLENCE</u>

1.30 When the Committee sought to know the mandate of proposed Centres of Excellence in Karnataka and Assam as announced in this year's Budget along with the estimated expenditure and timelines for completion, the Ministry in its written reply submitted as under:

"(i) The mandate of proposed Centre of RGIPT in Karnataka is to create an Energy Institute on the lines of world's leading energy Institutes for undertaking contemporary research duly involving other ministries and key stakeholders. The State Government of Karnataka has made available 150 acres of land, free of cost, for setting up this Institute.

(ii) The mandate of RGIPT Centre at Assam is to set up a Centre to cater to requirements of blue-collar technicians especially in upstream area to meet the current gap in skill set and to meet the anticipated demand in view of future exploration plans. Apart from skill-oriented courses, the Institute would also award diploma / degree to the students in sector-related courses.

(iii) The estimated expenditure under the capital head based on the earlier Detailed Project Report (DPR) prepared by RGIPT was Rs 235 crore for Assam Centre and Rs 358 crore for Bengaluru Centre.

(iv) It has now been decided that temporary campus of Assam Centre would start its academic session in 2017-18. RGIPT has been requested to submit a fresh DPR in light of the mandate as above for Assam centre.

(v) As far as Centre of Excellence at Bangalore is concerned, RGIPT has been requested to submit a fresh DPR covering the new vision, objectives, and processes for the proposed as a leading Energy Institute".

C. CESS ON CRUDE OIL

1.31 When the Committee enquired about the impact of current mode of cess being levied on the crude oil on the financial health of the upstream PSU oil companies, the Ministry in its written reply furnished as under:

"On 28th February, 2016, OID cess levied on domestically produced crude oil under Oil Industry (Development) Act, 1974 was changed from Rs. 4500/tonne to 20% ad-valorem w.e.f. 1.3.2016 through Finance Bill 2016. Accordingly this Ministry has notified the new rate effective from 1.3.2016.

When the price of crude oil crossed US$ 46.5/barrel, the proposed rate of 20% started impacting oil companies severely. The impact in terms of Rs./tonne vis-a-vis crude oil prices is given as under:

Cess impact w.r.t to earlier rate of Rs. 4500/Tonne

Crude price ($/bbl)	Cess @ 20% (Rs/Tonne)	Impact (Rs/Tonne)
30	2903	1597
35	3386	1114
40	3870	630
45	4354	146
46.5	**4500**	0
50	4838	-338
55	5322	-822
60	5805	-1305
65	6289	-1789
70	6773	-2273
75	7257	-2757
80	7740	-3240
85	8224	-3724
90	8708	-4208
95	9192	-4692
100	9676	-5176

105	10159	-5659
110	10643	-6143

Note: Impact has been computed as difference between cess at the ad-valoram rate and earlier rate Rs. 4500 per Tonne. Assumption 1 US$ = Rs. 66 and 1 tonne of crude oil = 7.33 barrel.

The new rate of OID cess has raised apprehension in the Oil sector. The representations were made by Upstream Oil Companies including ONGC to the Government to review and reduce the rate of OID Cess to 8% to 10% ad-valorem. Ministry of Petroleum has taken up the matter with Ministry of Finance for suitable correction".

1.32 On being asked to furnish the status of the issue relating to lowering of cess on crude oil and also, what would be the impact of rising international crude oil prices on Oil PSUs in case there is no change in the rate of cess, the Ministry have submitted as under:

"The cess on crude oil was charged at a fixed rate of Rs. 4500/- MT. which has been changed from fixed to ad-valorem at the rate of 20%. w.e.f. 1st March ,2016.

The cess on crude oil will increase with the increase in the international crude oil prices due to ad-valorem nature of cess and accordingly upstream oil PSUs will be impacted by higher crude oil cess.

Ministry of Finance vide letter No. F.No.O-38011/3/2012-Fin-II dated 30th March, 2016 had revised the OID Cess from Rs 4500/MT to 20% on ad-valorem basis effective 1st March, 2016.

The above revision in rate of OID Cess resulted in some cost saving to National Oil Companies (NOCs) initially due to low crude oil price prevailing at that time, based on the current crude price level of about USD 55/bbl and exchange rate of about Rs 68/USD, the present rate of OID Cess works out is even higher than the pre revised rate of Cess of Rs.4500/MT.

In view of this situation, NOCs have been representing to MoP&NG that the rate of OID Cess may be reduced to about 10% of the realized crude oil price. The Ministry has taken up the matter with the Ministry of Finance".

Further, when asked about the possibility of lowering of cess on crude oil, the representatives of the Ministry of Finance, during oral evidence said:

"....Now that the hardening of prices has started, the incidence has been more or less in the range of 4,500 to 5,000 except for the last three fortnights where it has gone to 5,400; but it is not clear whether these prices will remain persistent or not.

Secondly, we have examined the profitability of the crude oil companies also and seen that at this stage they are healthy.

.... in the 2017-18 Budget also, we have examined this issue and a view was taken that as and when the need arises we may intervene but as of now there does not appear a case to reduce the *ad valorem* levy".

D. REDUCTION OF IMPORT DEPENDENCE

1.33 The import of crude oil would increase from 80% to 84% during 2021-22. When asked by the Committee to explain as to how the vision of Prime Minister to reduce the import dependency by 10% by the year 2022 would be implemented, the Ministry have furnished the following detailed reply:

"To address the concerns of high import dependency in energy, during the Urja Sangam held on 27 March, 2015 at New Delhi, Hon'ble Prime Minister said *"We currently import around 77 per cent in energy sector, in oil, gas and petroleum sector. We can reduce this import by at least 10 per cent by 2022."*

In order to take this vision forward, Hon'ble Minister of State (I/C), P&NG constituted a committee under the Chairmanship of Additional Secretary, MoP&NG on "Preparing a roadmap to reduce the dependency on import in energy by 10% by 2021-22".

The said Committee was constituted on 9th June, 2015, and the report was submitted on 15th February, 2016, and it was accepted by the Government on 13.6.2016. The Committee, to achieve this goal, proposed a five-pronged strategy which broadly comprises of:

(i) Increasing domestic production of oil and gas;
(ii) Promoting energy efficiency and conservation measures;
(iii) Giving thrust on demand substituion;
(iv) capitalizing untapped potential in biofuels and other alternate fuels/ renewables and;
(v) implementing measures for refinery process improvements.

The Committee, by these five-pronged strategy, has estimated total savings 68.7 (O+OEG) MTOE (Oil 32.6 mtoe + Gas 36.1 mtoe) as against the required reduction of 61.8 (O+OEG) MTOE (Oil 38.6 mtoe + Gas 23.2 mtoe) in consumption of petroleum products in terms of crude oil equivelant and natural gas for meeting 10% target on import dependency by 2021-22.

Each of the above five strategies were considered in detail and actionable points for various divisions of this Ministry have been categorised under the following categories and circulated:

(a) steps required to be taken by this Ministry;
(b) steps required to be taken by this Ministry with support of Ministry of Finance;
(c) steps required to be taken by this Ministry with support of multiple ministries;

(d) steps required to be taken which pertains to other Ministries where this Ministry and / or its agencies will play a supporting role; and
(e) steps required to be taken exclusively by other ministries / agencies

Further, the action pertaining to several ministries / departments such as, Ministry of Finance; Ministry of New and Renewable Energy; Ministry of Agriculture; Ministry of Power, Ministry of Environment, Conservation and Forest; Ministry of Urban Development; Ministry of Rural Development; Ministry of Road, Transport & Highways; Bureau of Energy Efficiency, etc., have been culled out from the Report and forwarded to the concerned Ministries / departments for necessary action at their end.

Furthermore, various measures recommended in the report of the Committee on roadmap to reduce import dependency in energy by 10% by 2021-22, and the action taken in this regard as of now are detailed as follows:

(1) *Resource assessment –*

Resource assessment is the basic requirement for making an informed decision about an exploration program which is commensurate with the risk and reward associated with it. A well-defined resource estimate generally leads to better understanding of the investment possibilities and avoids pitfalls and disappointment.

Govt. has entrusted the responsibility for resource reassessment of Indian sedimentary basins of India' to KDMIPE, ONGC by collating all the G&G data acquired over last two decades by all E&P companies. Resource assessments study for ten basins has been completed. Draft reports are under preparation. Study for ten basins (Spiti-Zanskar, Himalayan Foreland, Assam Shelf, AAFB, Kutch-Saurashtra, Cauvery, Pranhita-Godavari, Bengal-Purnea, Rajasthan and Ganga-Punjab Plains) is in progress. (Start Date-1st Sept.2015). Remaining 6 basins will be considered for study once the study of 20 basins is complete. The resource reassessment is likely to complete by 30th November 2017.

2. Seismic appraisal by NOCs –

Seismic information constitutes a set of reliable scientific data without which appraisal of an area is incomplete. ONGC and OIL has been given the task for data acquisition of 2D seismic data under National Seismic Program. Acquisition work has commenced by Oil India Limited in December 2016 followed by processing and interpretation. The work is scheduled to be completed by February 2017.

ONGC has commenced 2D seismic data acquisition in September 2016. So far 773.22 LKM seismic data acquired in 7 sectors, namely , Saurashtra, Cambay, Rajasthan Kutch, Mahanadi Bengal, Deccan Sybclise North, Vindhyan Narmada sectors. It is scheduled to be completed by March 2019 tendering is in progress for allotment of processing and interpretation jobs which will be completed by July 2019.

3. Multi-Client Geo-scientific surveys/activities –

Seismic survey is an expensive process – particularly in offshore areas. Non-exclusive multi-client geo-scientific surveys area facilitates unique business proposition which allow appraisal of the area without any funding on the part of Government.

Under multi client geo scientific data acquisition policy, 310.5 LKM of CSEM data has been acquired and processed in West Coast-Kutch, Saurashtra & Mumbai Basin. Interpretation is in progress. It is scheduled to be completed by September, 2017. Another two proposals for 2D Seismic Survey in Eastern Offshore Andaman Islands (8867.16 LKM) and Offshore KG Basin (9852.55 LKM) has been received in DGH and is being sent for MoD/ MHA clearance which is expected to be finalized by July 2017.

4. Open Acreage Licensing Policy (OALP)/ NDR –

Implementation of OALP will give contractors the flexibility of identifying acreages of interest round the year or at predetermined intervals instead of waiting for the bidding rounds.

Govt. has approved the policy for offering the exploration acreages under revenue sharing mechanism through Open Acreage Licensing Policy (OALP). The draft MRSC is being finalized in consultation with PWC. The discussions and deliberations to finalize the methodology and terms and conditions for awarding of blocks is in progress. Both these activities are expected to be finalized by March 2017. After finalization of process of award and modern revenue sharing contract, the NIO will be finalized in consultation with MOPNG by June 2017. Other related activities such as hiring of Technical Service Provider, Web Portal design for HELP, portal for submission of EOI for blocks and E-Bidding is expected to be completed by end of August 2017.

As far as National Data Repository (NDR) is concerned it is ready for launch. All seismic processed stack data 2D and 3D available in the country have been loaded in data repository. The header information of 11,500 wells has been loaded. Data dissemination and pricing policy has been drafted and is under consideration at MoP&NG for approval by mid February 2017. A Secondary Data Centre (SDC) has been planned at Bhubaneswar. Site for establishment of SDC has been identified. Process for acquisition of site has been initiated. It is expected to be ready by end of November 2017.

5. Recycling of relinquished areas –

The area relinquished from time to time, which is around 10,64,013 Sq km, which includes substantial area relinquished for reasons other than poor hydrocarbon prospectively of the sedimentary areas.

The implementation of Open Acreage Licensing of blocks for E&P activities through NDR shall facilitate Recycling of relinquished areas. Steps are being taken up for resolving the long pending issues for determination of unfinished minimum work program.

6. Marginal field development –

A number of discoveries made by NOCs have not been developed over the years. The marginal fields rechristened as Discovered Small Fields (DSF) were offered in 2016 through DSF Bid Round-I. After successful e-bidding of the blocks, the qualified bids were evaluated at DGH and submitted to MoP&NG. A CCEA note has been put up for approval of award of contract areas which is envisaged by Mid February 2017. Draft contracts to be executed for Discovered Small Fields are being prepared at DGH which will be finalized after CCEA approval by end of February 2017. The signing of contracts with successful bidders is eventually envisaged by Mid March 2017.

Simultaneously, the discovered fields in NOC and PSC regime which are not on production are being identified for offering in DSF II bid round. The activity is expected to be completed by end of March 2017. In this regard, all fields which are discovered but not put on production since last 5 years either by NOCs or in PSC regime are being considered to be put up for bidding in DSF Round-II by June end 2017.

7. Extension of PSCs –

Policy for Grant of Extension to the Production Sharing Contracts signed by Government awarding small, medium sized and discovered fields to private Joint Ventures for grant of extension has been approved for the fields awarded under field bid rounds with specific terms and conditions. Operator for Dholka and Bhandut fields, JTI has submitted proposal for 10 years extension under this policy on 01.09.2016 for exploitation remaining reserves in the Dholka and Bhandut field. With regards to PSC extension of contracts awarded under Pre NELP bid round, draft Policy for extension of PSC has been prepared which is under examination.

8. Incentivizing IOR/EOR –

Maximizing recovery from producing oil & gas fields is one of the thrust areas identified in the 12th Five Year Plan for overall development of E&P industry.

DGH has now been monitoring the performance of National Oil Companies on monthly basis based on the key performance indicators. Incentives as derived in the note of 10% import reduction will be forwarded to Govt. for specific projects identified during the course of NOC monitoring.

9. Resolution of outstanding issues –

Some fields such as Ratna R Series, PY-3 field, Amguri field, and Champang with known potential are closed on account of unresolved contractual/other issues.

The issue of Ratna R Series is resolved. Mining lease of 1005 sq.km has been granted to ONGC and ONGC has completed New 3D Seismic Survey in the area. Interpretation of 3D Seismic is expected by June 2017. ONGC is proposing to drill 22 producing wells and 9 water injector wells in the area by the

year 2020-21. The first oil production @ 4000 BOPD is expected in May 2019 and peak production of about 14500 BOPD (0.7 MMTPA) is expected in 2020-21.

The issue of Amguri field is also resolved. Since Amguri field has been in a shut down mode since the last five and half years, the Operator plans to conduct a technical surveillance of the wells and the Equipment before being able to formulate a work plan for the revival of the Production from Amguri. Operator expects that is would take approximately three months, ie., by end of March, 2017, to formulate a firm work plan for recommencement of production from the Amguri field.

Government is closely monitoring for resolving the issue of PY#3 for restarting the production. Policy initiatives are required to allow cess and royalty as a part of contract cost in cases where these dues are paid by licensee.

Champang is another area of concern where the issues are to be resolved with State of Nagaland for allowing production from the fields in the State.

10. Unconventional hydrocarbon resource development –

Coal Bed Methane (CBM) has slowly come into production phase with current production close to 1 MMSCMD. On the other hand, shale gas exploration is still in the early phase of assessment and is limited to NOCs only. CCEA note has been circulated and expected to be approved soon. It will resolve the long pending issues and enhance CBM production from existing blocks.

Besides above, the Committee in its Report also recommended for constituting an Integrated Monitoring and Advisory Council (IMAC) to oversee the roadmap proposed under the five pronged strategy to achieve the target. In response to this, for constituting a committee, all the aforesaid concerned ministries / departments were requested to nominate an officer of the rank of Joint Secretary or above to be part of IMAC which will monitor the progress of implementation of the action points on 16.11.2016, and the concerned ministries / departments have appointed their nodel officers. An internal meeting of all the divisions under the chairmanship of Additional Secretary was held to discuss the steps have already been taken or required to be taken by this Ministry on 24.1.2017.

The first meeting IMAC is being scheduled shortly to discuss all the steps required to be taken by this Ministry on its own or with the support of other Ministries to oversee the roadmap proposed under the five pronged strategy and to take further course of action to achieve the target".

E. GST ON PETROLEUM SECTOR

1.34 Asked to give details regarding the impact of GST on petroleum sector, the Ministry submitted the following information:

"As per the GST Constitutional (Amendment) Bill, 2016, all petroleum products and services are covered under the ambit of GST except supplies of crude oil,

MS, HSD, ATF and Natural Gas which are subject to levy of GST from a date to be recommended by the GST Council.

GST council finalized a four-tiered GST rate structure i.e. 5%,12%, 18% and 28% with lower rates for essential items and highest for luxury and de-merit goods, many of which would also attract an additional cess. However, the list of goods that would fall under each tax rate category is yet to be finalized.

GST, being a destination-based consumption tax (based on VAT principle), would greatly help in removing economic distortions and will help in development of a common national market.

Impact of GST on Upstream Companies

The Model GST Law as available after Constitutional Amendment for Goods & Services Tax (GST), provides that the GST Law would not apply on five specified petroleum products viz. Crude Oil, Natural Gas, High Speed Diesel (HSD), Motor Sprit (Petrol), and ATF.

Consequently, the main products of E&P Sector viz. Crude Oil & Natural Gas, shall continue to be leviable to existing levies i.e. Royalty, OID Cess, NCCD, VAT/Sales Tax etc. However, on purchase of goods and services required for exploration and production of Crude Oil and Natural Gas, would attract GST. Hence, it would have adverse implication on E&P Sector as explained here under:

(a) GST on import of Goods, if existing exemption is withdrawn:
Presently, there is customs duty exemption (BCD as well as CVD & SAD) on import of specified goods for petroleum operations. Further, on domestic sourcing of such specified goods under procedure of ICB, there is exemption from payment of excise duty as well.

Under GST law, if above exemption is not continued and IGST is levied on import of such goods, there would be substantial additional tax implication on upstream companies.

(b) Additional Tax Burden on Offshore Lump Sum Turnkey (LSTK) Contracts under GST:
Presently, the provisions of State VAT Acts are not applicable in Offshore and therefore VAT is not applicable on LSTK Contract (Works-Contract). Further, Service Tax is applicable on only 40% of total contract value (Original Works). Since the GST Law has been proposed to be applicable in Offshore as well, such LSTK contract in Offshore would attract GST on 100% of contract value. Accordingly, there would be additional tax burden on E&P Sector under GST regime.

(c) Increase in GST Rate on Input Services availed by ONGC:
ONGC also avails services such as drilling, logging, hiring of vessels/helicopters etc. where service tax at the effective rate of 15% on total value is being paid.

Under GST regime, the same is expected to be taxed at increased rate of 18% (expected GST rate) on 100% value. Due to increase in rate without credit (set off), there would be additional tax burden on upstream companies.

(d) Additional Stranding of Taxes on Inter-State Purchases of Goods under GST:
Under GST regime, the IGST would be charged instead of CST on inter-state purchase of goods. The rate of IGST (being CGST plus SGST) would be much higher than existing rate of CST which is 2% against Form-C. Since no credit is available to E&P Sector, there would be additional stranding of taxes.

(e) Additional tax burden on domestic purchases of goods under ICB, if deemed export benefit is withdrawn under GST:
Presently, on local purchases of goods under procedure of ICB for petroleum operation, excise duty is NIL. However, VAT at the rate of 14.5% (general rate in all most all States) is levied. If the above exemption/deemed export benefit is not extended, then the tax of local purchases would be much higher (i.e. CGST plus SGST). Consequently, there would be additional tax burden.

(f) Non-availability of Credit on Local Purchases of Goods under GST:
At present, upstream companies are generally availing credit for VAT paid on local purchase of goods for exploration & Production of Crude Oil & Natural Gas. Under GST, such purchase of goods for petroleum operation would attract GST and credit of GST paid on such goods would not be available as Crude Oil and Natural Gas would be out of GST.

(g) Additional burden due to levy of GST on Stock Transfer:
Presently, on stock transfer against Form-F, there is no VAT. However, under GST, such transfer of goods from one State to another (one taxable person to another) would attract IGST. Since, the Crude & Natural Gas are outside GST, the payment of IGST would become cost to E&P Sector.

(h) Dual Compliance:
ONGC is producing Value Added Products such as LPG, SKO, Naphtha, C2-C3, ATF, HSD, LSHS etc in addition to Crude Oil & Natural Gas. The Crude Oil, Natural Gas, HSD, ATF would continue to attract existing law i.e. Excise Duty, VAT/CST, OID Cess, NCCD, and Royalty whereas LPG, SKO, Naphtha, C2-C3 etc. would be under GST. Therefore, it would create a complex situation for dual compliance of GST as well as existing laws in addition to increase in compliance cost".

1.35 During the oral evidence, the CMD of ONGC submitted the following regarding the GST on the upstream sector:

"..... Service tax may not be there on services but there would be GST on services. If Service tax is 15 per cent, GST is likely to be 18 per cent. So, we pay 18 per cent and do not get any credit out of the crude oil sale because it is not covered under GST".

1.36 Supplementing about the impact of GST on the downstream companies, the CMD of HPCL submitted the following:

> "... I would like to say one more thing on this that this is not only the question of crude oil. Let us say that from the refinery you are producing MHSSD but you are also producing LPG, ATF and all other projects. Part of them is under GST and part of them are not under GST.
>
> ...So, the problem is bigger than the crude oil item. It is because all the input which is going from the refining also cannot be claimed as a CENVAT and so the services. Out of the refinery produce, only petrol, diesel and ATF are not there".
>
> ...but the question is how do you allocate this cost. It is because it is the processed industry. So, there was some suggestion that even if there is one per cent GST you include it in the GST.

F. MERGER OF OIL PSUs

1.37 The Finance Minister in his budget speech (2017-18) made the following observation:

> "We see opportunities to strengthen our CPSEs through consolidation, mergers and acquisitions. By these methods, the CPSEs can be integrated across the value chain of an industry. It will give them capacity to bear higher risks, avail economies of scale, take higher investment decisions and create more value for the stakeholders. Possibilities of such restructuring are visible in the oil and gas sector. We propose to create an integrated public sector 'oil major' which will be able to match the performance of international and domestic private sector oil and gas companies".

1.38 The Committee sought to know which PSUs are being considered for integration and whether any criteria has been developed for the integration process of oil PSUs, the Ministry in its written reply submitted the following:

> "At present, there is no decision taken on merger of Oil and Gas PSUs. In this context, Finance Minister in the Union Budget Speech of 2017-18 on February 1, 2017 has inter alia stated that "We see opportunities to strengthen our CPSEs through consolidation, mergers and acquisitions. By these methods, the CPSEs can be integrated across the value chain of an industry. It will give them capacity to bear higher risks, avail economies of scale, take higher investment decisions and create more value for the stakeholders. Possibilities of such restructuring are visible in the Oil and Gas sector. We propose to create an integrated public sector "Oil Major" which will be able to match the performance of international and domestic private sector oil and gas companies." Follow up action on the

announcement of the Finance Minister in the Union Budget Speech 2017-18 will be taken in consultation with the Ministry of Finance and other stakeholders".

1.39 Regarding merger of PSUs in the petroleum sector, the Secretary during oral evidence submitted the following:

> "... as you would observe, we have replied to this in the replies. This was announced in the hon. Finance Minister's Budget Speech. Thereafter, we discussed it with the Finance Ministry. Basically, the Department of Investment and Public Asset Management (DIPAM), are handling this subject. So, the Secretary, DIPAM, told us that he will be writing a letter to us and only yesterday, we received the letter. In that letter, they have said that the Ministry should carry out an exercise as to what are the possibilities for mergers, acquisitions or bringing integration of various companies. We will start the process and will consult and discuss with various stakeholders. We will find a way as to what is the best way taking into the interest of all the stakeholders. Then, we will have further consultations with the Finance Ministry.
>
> ..... This is today's situation. As I mentioned this involves consultation with a number of stakeholders and then the decision is taken. In other words I want to say is that whatever decision is taken, it will take some time. It has just been announced by the hon. Finance Minister in his Budget Speech. This is an announcement of a policy. We will see as to what will happen within this broad policy framework. It has given petroleum sector as an example but probably they have other sectors in their mind as well. So, we will consult all our stakeholders and then also the Finance Ministry and then, we will arrive at a decision. Immediately, I am not in a position to say as to exactly what is going to happen because we will have to discuss. There was no formal consultation on this issue before".

G. ENERGY MIX

1.40 On being enquired about details of energy mix of the country for the last three years, measures that have been taken by the Government to increase the share of natural gas in energy mix to the mandated 15% and also the projected energy mix for the next five years, the Ministry have provided the following information:

> "As per BP Statistical Review of World Energy- June 2015, the Compounded Annual Growth Rate (CAGR) of natural gas consumption in the country has been 4.0% and -5.2% in last 10 and 5 years respectively. In year 2014, India ranked at 14th position in world gas consumption. The global average of natural gas consumption in primary energy mix was about 24% in year 2014. However, the share of natural gas in country's primary energy mix was about 7.1% in 2014. IEA has envisaged a convergence in share of oil and gas to 25% each by 2035 at global level. Due to number of differentiators, including carbon content per unit

of heat and lower cost in calorific value, gas is preferred to oil. Thus, a supportive regime for gas is required to increase the gas consumption to the level of 25% of primary energy consumption of the country by 2040.

The country has witnessed a decline in gas consumption in last 5 years. As per BP Statistical Review of World Energy- June 2015, the CAGR of domestic gas production is 0.7% in last 10 years and -11.2% in last 5 years. The domestic gas production has increased by 6.9% from the level of 2005 and the gas consumption has increased by 41.9% from the level of 2005. There is an increase in import dependency of natural gas in the form of Liquefied Natural Gas (LNG) which in turn has increased the vulnerability to external price and supply shocks.

Details of sector-wise domestic and RLNG consumptions during the years 2012-13 to 2015-16 are given below:

Sectors	FY 2013-14			FY 2014-15			FY 2015-16				
	R-LNG	Total (D+LNG)	Domestic	R-LNG	Total (D+LNG)	Domestic	R-LNG	Total (D+LNG)	Domestic	R-LNG	Total (D+LNG)
Fertilizers	8.68	40.18	30.30	12.65	42.95	26.70	15.21	41.91	25.11	18.73	43.83
Gas Based LPG plants for LPG extraction	0.51	6.43	1.83	1.09	2.92	2.75	0.09	2.84	2.03	0.38	2.41
Power	5.02	42.54	27.26	2.17	29.43	25.33	2.71	28.04	22.90	7.45	30.35
CGD Sector	8.71	15.60	7.25	8.23	15.48	9.16	7.14	16.30	10.74	6.88	17.62
TTZ	0.07	1.05	0.98	0.07	1.05	1.00	0.12	1.11	1.00	0.14	1.14
Small consumers having allocation less than 50,000 SCMD	2.99	5.44	2.45	2.58	5.03	2.47	1.86	4.33	0.73	0.21	0.94
Steel & Sponge iron	**3.45**	**4.55**	**1.32**	**1.82**	**3.14**	**0.88**	**1.32**	**2.20**	**0.42**	**1.67**	**2.09**
Refineries	7.31	9.18	1.89	10.45	12.34	1.44	10.53	11.97	1.18	19.46	20.65
Petrochemicals	1.96	4.90	3.82	0.88	4.70	1.67	1.96	3.63	1.26	3.64	4.90
Others	1.37	2.98	1.52	1.17	2.69	1.36	1.91	3.27	1.71	3.61	5.33
Internal consumption - pipeline system	0.00	1.44	1.40	0.00	1.40	1.18	0.00	1.18	1.29	0.00	1.29
Total	**40.07**	**134.29**	**80.02**	**41.11**	**121.13**	**73.93**	**42.85**	**116.78**	**68.38**	**62.18**	**130.56**

The energy consumption is expected to increase significantly in Building, Industry and Transport sectors by 2040. It is expected that Industry and Transportation sector demand are going to increase by about 250% in 2040 from the levels of 2012. The increased energy demand in these sectors suggest for an ample scope to increase the share of gas in primary commercial energy mix in the country.

In order to increase the availability of natural gas, the Government is promoting expansion of Natural Gas Infrastructure i.e. Pipeline, LNG terminals, City Gas Distribution (CGD) Network and Compressed Natural Gas (CNG) retail network in the country. Oil Marketing Companies are very much present in gas sector and are participating in the development of gas sector i.e. Indian Oil Corporation Ltd.(IOCL) is developing an LNG terminal at Ennore, a 1175 Km long South India Gas Pipeline network and various CGD networks in different parts of the country.

The availability of domestic gas supplies are likely to grow only over medium term. However, the dependence on imported RLNG is increasing in the country. In FY 2015-16, country has consumed about 62 MMSCMD of RLNG which is approximately 46 % of the overall consumption of about 130 MMSCMD. To mitigate supply security risk, price volatility risk, LNG storage and pipeline design capacity constraints, various LNG suppliers are considering developing underground Gas Storage.

The provisions under the Petroleum and Natural Gas Regulatory Board (PNGRB) Act, 2006 provide for creation and development of petroleum product and natural gas pipeline with the “Common Carrier” space to ensure the access to all pipeline, infrastructure. To enforce the open access in pipelines on common carrier principle, the relevant regulatory framework has been notified and is under implementation by PNGRB. However, in order to encourage further competition at Market level, the active participation of Private Players in marketing and distribution of petroleum products and natural gas is required. PNGRB Act, 2006 contains the enabling provisions for open access to the extra capacity in Storage and Marketing infrastructure.

In order to encourage LNG imports, the government of India has kept imports of LNG under the Open General License (OGL) category and has permitted 100% foreign direct investment (FDI) in LNG terminals. The interested players in establishment of LNG terminals area allowed to develop LNG terminals based on their own techno-commercial feasibility. Further, the Ministry has also framed and notified relevant rules on 30th October, 2012 under Section 62(2)(e) of PNGRB Act, 2006 providing for minimum eligibility criteria for establishment of LNG terminals in the country with the condition of having mandatory “Open access” on the common carrier principle".

H. PRADHAN MANTRI URJA GANGA (PMUG)

1.41 When asked to furnish details on progress being made in laying of pipelines as part of National Gas Grid including the cost of pipelines and timelines by which these projects are planned to be completed, the Ministry have submitted the following factual information:

"The details of under-construction gas pipeline including the length, estimated project cost of the pipeline, scheduled completion and states through which it passes through , as on 30.09.2016, are tabulated below:

S. No.	Name of Pipeline	Name of Entity	Length (Kms.)	Estimated Project Cost (Rs. in Cr.)	Scheduled completion	State through which it passes
1	Jagdishpur-Haldia & Bokaro-Dhamra *	GAIL (India) Ltd	2619	12940	2020	Uttar Pradesh, Bihar, Jharkhand, West Bengal and Odisha
2	Kochi-Koottanad-Bangalore-Mangalore(Ph-II)	GAIL (India) Limited	879	2915	2019	Kerala, Tamil Nadu and Karnataka
3	Surat-Angul (Paradip)	GAIL (India) Limited	1700	10280	Not yet started.	Gujarat, Maharashtra, Chattisgarh and Odisha
4	Vijaipur-Auriya-Phulpur	GAIL (India) Limited	672	4309	2020	Madhya Pradesh and Uttar Pradesh
5	Ennore-Thiruvallur-Bengluru-Puducherry-Nagapatinam-Madurai-Tuticorin	Indian Oil Corporation Ltd.	1385	4497	2018	Tamil Nadu and Karnataka
6	Kakinada - Vizag - Srikakulam	AP Gas Distribution Corporation	391	1013	2017	Andhra Pradesh
7	Mallavaram - Bhopal - Bhilwara via Vijaipur	GSPL India Transco Limited	2042	8086	2017	Andhra Pradesh, Telanagana, Chattisgarh, Madhya Pradesh and Rajasthan
7A	MBBPL Dahod Connectivity with GSPL's Gujarat Gas Grid	GSPL India Transco Ltd.	123			Gujarat and Madhya Pra
8	Mehsana - Bhatinda	GSPL India Gasnet Limited	2052	6864	2017	Gujarat, Rajasthan, Haryana and Punjab
9	Bhatinda - Jammu - Srinagar	GSPL India Gasnet Limited	725	1520	2017	Punjab, Jammu & Kashmir
10	Shahdol - Phulpur	Reliance Gas Pipelines Limited	312	1302	Mechanical work completed, commissioning under process.	Madhya Pradesh and Uttar Pradesh
11	Ennore - Nellore	Gas Transmission India Pvt. Ltd.	430	730	2017	Andhra Pradesh and Tamil Nadu
12	Tie-in connectivity to the proposed Jaigarh LNG Terminal	H-Energy Gateway Pvt. Ltd.	60	300	2018	Maharashtra
13	Jaigarh-Mangalore	H-Energy Pvt. Ltd.	749	2389	2019	Maharashtra, Goa and Karnataka
Total			**14139**	**57145**		

1.42 When asked to provide the status of the three pipeline sanctions with total length of about 2500 km for implementation through PPP mode with Viability Gap Funding (VGF), the Ministry have submitted as under:

"As per the action plan of MoP&NG regarding implementation of additional 15000 km of pipelines to complete the gas grid across the country, following 03 pipelines were envisaged for implementation through PPP mode with Viability Gap Funding (VGF).

(i) Ranchi-Talcher-Paradip : 520 km

(ii) Barauni-Guwahati-Agartala: 1300 km

(iii) Haldia-Paradip/Srikakulam: 500/ 700 km

MoP&NG identified Ranchi-Talcher-Paradip pipeline for implementation on pilot basis through PPP mode with VGF support. The other two proposed pipeline could be considered after successful implementation of the identified pilot project.

- **Status of Ranchi-Talcher-Paradip pipeline (pilot project under PPP mode with VGF support):**

MoP&NG appointed GAIL (India) Ltd. as the "Sponsoring Authority" for development of RTPPL project through PPP mode. MoP&NG vide letter dated 23.09.2015 amended the pipeline route as "Bokaro-Ranchi-Talcher-Angul pipeline".

Subsequently, ***DEA has indicated that the PPP route will not be feasible for the "Gas Pipeline Infrastructure" and pilot project may not be considered by the Empowered Committee for this purpose***. The pipeline namely Bokaro-Ranchi-Angul-Paradip/Dhamra will be clubbed along with Jagdishpur-Haldia pipeline (JHPL) and the gas pipeline loop would be completed from Phulpur to Paradip/Dhamra.

Accordingly Bokaro-Ranchi-Angul-Paradip/Dhamra pipeline has been clubbed with JHPL and has been named as Jagdishpur-Haldia/Bokaro-Dhamra pipeline (JHBDPL).

The Government of India has recently taken a decision to provide a capital grant of Rs.5176 crore @ 40% of the estimated capital cost of Rs.12,940 Crore to GAIL for development of Jagdishpur-Haldia/Bokaro-Dhamra Gas Pipeline (JHBDPL) project, popularly known as the "PradhanMantriUrja Ganga" of Eastern India. The work has commenced. This project will ensure the availability of clean and eco-friendly fuel, i.e. natural gas to the Eastern part of the country. It will also bring clean cooking fuel at the door step of Domestic households as well as provide clean fuel to transport sector through CGDs".

1.43 During the oral evidence, the Secretary made the following submission regarding PMUG:

> "For Pradhan Mantri Urja Ganga Yojana, 2020 is the time by which the whole project will be completed. Phase I will be completed by 2018. For the remaining phase II and phase III, the construction will start simultaneously along with phase I and it will be completed by 2020".

I. CITY GAS DISTRIBUTION NETWORK

1.44 Asked to provide status update on the achievement in regard to the proposal of the Government to connect one crore households through PNG network in 5 years, the Ministry furnished the following update:

> "PNG supplies are made by the CGD entities. As of November 2016, there are approximately 32,67,000 domestic PNG connections in the country. As part of the terms and conditions of authorization of CGD entities, PNGRB prescribes Minimum Work Program (MWP) for each Geographical Area calculated in accordance with provisions of extant Regulations and bid conditions. PNGRB has so far authorized 75 Geographical Areas (GAs) for development of CGD network in the country with the overall domestic PNG connection targets of 96,88,947 by the year 2021 as tabulated below:

Month/Year	December 2017	December 2019	December 2021
Targets for domestic PNG connection (Nos.)	78,01,205	92,68,630	96,88,947

> It may be noted that domestic PNG connection targets are fixed at 5% of households in a specific GA, which is to be met by the entity in the initial five years from date of authorization. However, the entities are expected to expand PNG domestic connection base in the GA based on commercial feasibility".

1.45 The Committee note that the current domestic PNG connections in the country stand at 32.67 lakhs, whereas the Ministry has set the target of 78.01 lakh connections by December 2017. In this regard, when asked about the action plan to achieve this target by the end of this year, the Ministry have intimated as under:

> "Petroleum & Natural Gas Regulatory Board (PNGRB), established under the PNGRB Act, 2006, has identified a number of cities across the country for rolling out the development of CNG network in the phased manner in synchronization with the development of natural gas pipeline connectivity/natural gas availability and feasibility for grant of authorization to develop CGD networks.

PNG supplies are made by the CGD entities. As of 01.12.2016, there are 3380399 domestic PNG connections in the country. As part of the terms and conditions of authorization of CGD entities, PNGRB prescribes Minimum Work Program (MWP) for each Geographical Area calculated in accordance with provisions of extant Regulations and bid conditions. PNGRB has so far authorized 75 Geographical Areas (GAs) for development of CGD network in the country with the overall domestic PNG connection targets of 78,01,205 by December 2017.

The Government has given priority in allocation of domestic gas (the cheapest gas available in country) for supply to households in the form of Piped Natural Gas [(PNG(D)] and transport segment in the form of Compressed Natural Gas [(CNG (T)] across the country. Government is meeting 100% gas requirement of PNG (Domestic) and CNG (Transport) segment of the City Gas Distribution (CGD) networks across the country by domestic gas.

In order to make available the natural gas in the Eastern parts of the country, the Government of India has taken a decision to provide a budgetary support of Rs.5176 crore (i.e. 40% of the estimated capital cost of Rs.12,940 Crore) to GAIL for development of Jagdishpur-Haldia/Bokaro-Dhamra Gas Pipeline (JHBDPL) project, popularly known as the “Pradhan Mantri Urja Ganga” of Eastern India. This pipeline will transport Natural Gas to the industrial, commercial, domestic and transport sectors in the States of Bihar, Jharkhand, Odisha, West Bengal and Uttar Pradesh including CGD projects in the cities of Varanasi, Patna, Ranchi, Jamshedpur, Bhubaneswar, Kolkata and Cuttack, etc".

1.46 The Committee understand that the number of Geographical Areas (GAs) to be covered during 2016-17 is 75 as against 40 in 2014-15. When enquired about the current status on this in the backdrop of 90 per cent increase in GAs for P&NG roll out, the number of consumers as expected to increase only 25 percent from 26.3 lakhs to 32.8 lakhs, the Ministry have submitted as under:

"PNG supplies are made by the CGD entities. As of 01.12.2016, there are 3380399 domestic PNG connections in the country. It is submitted that the increase in number of PNG connections is not directly proportional to the increase in number of Geographical Areas (GAs) immediately after their authorization by the PNGRB. The number of PNG connections increases gradually with the continuous progress of development of CGD network in the authorized GA. It may be noted that domestic PNG connection targets are fixed at 5% of households in a specific GA, which is to be met by the entity in the initial five years from date of authorization. However, the entities are expected to expand PNG domestic coverage at a faster pace in the GA after development of basic CGD infrastructure".

1.47 On being asked about the current allocation of natural for domestic gas, the Ministry have stated as under:

> "At present, the full demand of PNG (D) and CNG (T) segments of CGD sector is met through domestic gas. Industrial and commercial demand of CGD network is being met by various sources of gas including RLNG at Market Determined Price. This arrangement is expected to continue till availability of domestic gas to meet PNG (D) and CNG (T) needs".

J. REDUCTION OF DUTY ON LNG

1.48 The Committee noted that one of the Budget announcements was reduction of customs duty on LNG. When asked the impact of reduction of customs duty on LNG from 5% to 2.5% on the petroleum sector, particularly its pricing, domestic sales and domestic production of natural gas, the Ministry have provided the following details:

> "Reduction of Customs duty on LNG from 5% to 2.5% is expected to benefit the gas consuming industries. Based on the LNG consumption in FY 2015-16, the estimated savings to gas consuming industries is estimated to the tune of Rs. 900 Crore on account of reduction in custom duty. This positive step taken by the Government will help in making LNG price competitive to alternate fuels and industries will be encouraged to switch over to LNG from other competing fuels. Reduction in custom duty on RLNG will encourage demand for RLNG in domestic market".

1.49 Asked to furnish the details of LNG re-gasification and storage installations/capacity available in the country, the Ministry furnished the following:

> "The details of the current LNG terminal capacity as compared to the previous year in India are provided below:

Name of Terminal	Name of Operator	Capacity (MMTPA) as on 01.01.2017	Capacity (MMTPA) as on 01.04.2016
Dahej	Petronet LNG Ltd.	15 MMTPA	Existing 10 MMTPA to be increased to 15 MMTPA
Hazira	Hazira LNG Pvt. Ltd.	5MMTPA	5 MMTPA
Dabhol	RGPPL (JV of GAIL - NTPC)	1.692 MMTPA in phase -1 without breakwater to be increased to 5 MMTPA	1.692 MMTPA presently without break water to be increased to 5 MMTPA
Kochi	Petronet LNG Ltd.	5 MMPTA	5 MMTPA
Total		**30 MMPTA**	**21.692 MMTPA**

1.50 Asked by the Committee as to whether the capacity is being utilized by the terminals of Petronet LNG Ltd., the Ministry in its written reply stated as under:

> "Petronet LNG Ltd (PLL) 15 MMTPA LNG terminal at Dahej is successfully operating at its nameplate capacity. PLL had commissioned Kochi LNG terminal of 5 MMTPA capacity in September, 2013. The Kochi terminal is expected to be connected to demand center within Kerala including Kayamkulam, certain districts of Tamil Nadu, Bangalore and Mangalore through pipeline network, viz., network of Kochi area, Kochi-Bangalore and Kochi-Mangalore. Out of these, only local pipeline network of about 45 kms in Kochi has been completed so far. In the absence of planned pipeline network, Kochi terminal is being operated at around 5% of its nameplate capacity".

K. EXPLORATION & PRODUCTION OF CRUDE OIL AND NATURAL GAS

1.51 When asked to furnish details regarding the current demand of crude oil and natural gas in the country along with figures for domestic production of crude oil and natural gas in the country for last three years year-wise, the Ministry replied as under:

> "During last three years (2013-16), crude oil production & natural gas production by ONGC, OIL and Pvt/JV companies are given as under:

Crude oil production in last 3 years (Million Metric Tonne)

	2013-14	2014-15	2015-16
ONGC	22.246	22.267	22.368
OIL	3.466	3.412	3.225
Private/JVs	12.076	11.785	11.356
Total	**37.788**	**37.464**	**36.949**

Natural Gas production in last 3 years (Billion Cubic Metre)

	2013-14	2014-15	2015-16
ONGC	23.284	22.022	21.177
OIL	2.626	2.722	2.836
Private/JVs	9.497	8.912	8.235
Total	**35.407**	**33.656**	**32.248**

1.52 On enquiry about the targets and the actual production for oil and natural gas production during the 12th Plan, the Ministry stated as under:

> "Crude oil production & natural gas production by ONGC, OIL and Pvt/JV companies during 12th Plan period are given as under:

Crude Oil Production (MMT)

	2012-13		2013-14		2014-15		2015-16		2016-17	
	Plan	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual***
ONGC	25.05	22.56	28.27	22.25	28.00	22.26	26.29	22.37	25.46	16.629
OIL	3.92	3.66	4.00	3.47	4.06	3.41	4.16	3.23	4.20	2.43
Pvt./JV - PSC	13.34	11.64	13.30	12.08	12.70	11.79	12.10	11.36	11.50	7.986
Total	**42.31**	**37.86**	**45.57**	**37.79**	**44.76**	**37.46**	**42.55**	**36.95**	**41.16**	**27.044**

* Production upto December 2016 provisional

Natural Gas Production (BCM)

	2012-13		2013-14		2014-15		2015-16		2016-17	
	Plan	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual***
ONGC	25.27	23.55	25.47	23.28	26.67	22.02	28.22	21.18	38.68	16.42
OIL	3.30	2.64	3.80	2.63	4.00	2.72	4.27	2.84	4.45	2.211
Pvt./JV - PSC	23.71	14.49	32.38	9.50	39.40	8.91	40.43	8.23	41.46	5.253
Total	**52.28**	**40.68**	**61.65**	**35.41**	**70.07**	**33.66**	**72.92**	**32.25**	**84.59**	**23.884**

* Production upto December 2016 provisional

Reasons for shortfall in crude oil and natural gas production

Reasons for shortfall in Crude Oil: Production of crude oil was less than the target because of decline in production from the major producing fields of the country particularly in Mumbai High, Gujarat and North-Eastern region that are quite old and ageing fields. Production of crude oil was also affected due to bandhs/ blockades in Assam and delay in commencement of production from wells in Andhra Pradesh.

Reasons for shortfall in natural gas: The shortfall in natural gas production was mainly due to sharp decline in production in KG deep-water block operated by RIL, natural decline in major gas producing fields like Bassein, M&S Tapti, Gujarat, etc., and delay in commencement of production from eastern offshore fields. Blast in Tatipaka gas pipeline of GAIL in East Godavari District in last week of June, 2014, affected production in Andhra Pradesh. Shutdown for maintenance of ONGC platform, Production was also affected due to consequential effect of bandhs / blockades in the North Eastern Region".

1.53 ONGC is the premier national oil company engaged in exploration activities in the country. On being enquired by the Committee about the steps taken by ONGC and other upstream oil PSUs to increase domestic production of crude oil and natural gas as

part of the mandate of Ministry towards reduction of import dependence by 2022, the Ministry have stated as under:

(A) The steps being taken by ONGC –

"Following the Hon'ble Prime Minister's vision to reduce import dependency of oil & gas by 10% by 2022, ONGC through its exploratory efforts is taking **several steps** to increase its indigenous production of crude oil/gas by augmenting its reserve base so as to reduce the import dependency in the country through:

- Continued exploration of deeper plays and shallow plays in existing fields/ Basins,
- Exploration in geologically complex and logistically challenging areas like North Eastern states, Himalayan Foothills, Frontier Basins like Vindhyan, Ganga, Bengal Basin; and
- Enhancement of production through early monetization of Marginal Fields through in-house capabilities as well as by out-sourcing.
- Monetization of yet to be developed discoveries

In addition, ONGC has placed high focus on exploration and development of unconventional plays like Shale gas/oil, Fractured Basement and HP-HT reservoirs.

(i) Exploratory efforts through 2017 to 2022 –

Continued exploratory efforts by ONGC in its operated areas will yield more reserve accretion in coming years. ONGC is making all out efforts to maximize its reserve base through exploratory efforts which will ultimately help in augmenting domestic production. Some of these reserves will also contribute to production with a gestation period of about 1- 2 years for onland, 3-5 years for shallow offshore and 5-7 years for deep waters in Nomination acreages and in NELP acreages monetization is governed by PSC stipulations.

ONGC in its proposed mid-term exploratory plan projections during the next five years from 2017-18 to 2021-22 envisages drilling of about 590 exploratory wells, 2D seismic survey of 2880 LKM, 3D seismic survey of around 34000 SKM. The projection of exploratory inputs during next five years is being envisaged to accrete initially In-place hydrocarbons of about 1156 MMtoe and Ultimate Reserve accretion of 473 MMtoe.

During 2016-17, ONGC has the target to acquire 215 LK of 2D, 7060 SK of 3D seismic data and to drill 120 exploratory wells. With these exploratory inputs accretion of 86 MMtoe Ultimate oil & gas reserve is envisaged. Against these targets as on **01.02.2017**, ONGC has acquired 49 LK of 2D, 4302 SKM of 3D seismic data and has drilled 77 exploratory wells and made 16 discoveries out of

which 6 onland discoveries in Nomination acreages have been monetized. Further exploratory efforts are continuing.

During 2017-18, ONGC has planned to drill 110 exploratory wells and to carry out 280 LK of 2D, 6368 SKM of 3D seismic survey. With these exploratory efforts accretion of Ultimate Reserves of 84.50 MMtoe is envisaged.

ONGC is also carrying out exploration in Category-III basins also like Himalayan Foreland, Vindhyan, Bengal and Purnea basins in addition to Category-I & II basins to locate commercial hydrocarbon deposits which has resulted in gas discoveries with encouraging results in Vindhyan Basin in the State of Madhya Pradesh. Besides, ONGC is pursuing exploration efforts in unconventional plays like Fractured Basement, HP-HT/tight Plays and Shale Gas/Oil.

In order to enhance domestic production, ONGC has undertaken several specific initiatives like redevelopment of major fields which are in mature stage of exploitation, implementation of IOR/EOR schemes to enhance recovery, development of tight/ HP-HT reservoirs and monetization of new discoveries. A total of 102 new discoveries in Nomination and NELP blocks are under different stages of development and majority of these new discoveries will start contributing to the domestic oil and gas production by 2021-22. In HP-HT areas, special efforts are being undertaken in development of HPHT/ Tight reservoirs in Nagyalanka field in KG basin where FDP has been submitted and approval is awaited. Efforts towards realizing production from HP-HT reservoirs of KG & Cauvery basins are planned through turnkey service contracts which will help in increasing the production.

ONGC has also taken initiatives to attract investment by private companies in development of fields discovered by it. Ten onshore small and marginal fields have been given on service contract to different companies for development.

ONGC has been employing **latest state-of-the-art exploration technologies** in challenging areas viz. Broadband 3D seismic API in Western and Eastern offshore, Carpet 3D campaigns in on-land sectors of Cambay and KG basins, Controlled Source Electro-Magnetic (CSEM) survey in KG deep water and **Gradiometry (AGG) survey in logistically challenging** but prospective hydrocarbon provinces in North-east region. ONGC for the first time acquired 500 SKM of Control Source Electro-Magnetic Survey (CSEM) data in deep-water the block (KG-DWN-9/2). Airborne Gravity Gradiometry (AGG) survey planned for better subsurface imaging in the logistically difficult areas covering Cachar (Pre-NELP Block, AA-ONJ/2) and NELP block, AA-ONN-2001/2 in Mizoram and South East Geleki in North Assam Shelf covering an area of 12395 Km^2 in Assam & Assam-Arakan Basin has started on 18.12.2016 and as on **date**, ONGC has acquired 12413 LK of AGG data.

(ii) Monetization of yet to be developed discoveries:

ONGC is making all out efforts for development & monetisation of the un-monetised discoveries in its operated acreages. Continued exploratory efforts will

add more discoveries for monetization. These efforts will help in augmenting in domestic oil & gas production in coming years. During 2016-17 ONGC has monetised 7 discoveries, which were declared before 2016-17. During 2016-17, as on 22.02.2017, ONGC has declared 18 discoveries out of which 6 onland discoveries in nomination acreages have been monetized.

ONGC has been putting in continuous efforts to increase domestic production in the areas ranging from exploration, drilling, reservoir diagnostics, pressure maintenance, and well intervention to induction and adoption of new technology. Efforts made in the above stated areas are also consolidated in forms of development or infrastructure projects. All schemes and projects have direct or indirect impact to maintain and augment the oil/gas production.

(iii) Major Projects/ Schemes

At present a total of 31 projects (costing > Rs. 100 Crs,) are in various stages of implementation. These projects have been approved by ONGC Board. Total approved cost of the projects is about Rs. 91,000 Cr. with envisaged oil gain of 57.08 MMT & gas gain of 146.36 BCM over the profile period.

The numbers of ongoing projects are likely to be completed progressively starting from March 2017 till the FY year 2022-23 are summarised below:

- 02 projects worth Rs. 1456.14 Cr likely to be completed in FY 2016-17.
- 12 projects worth Rs. 18220.1 Cr likely to be completed in FY 2017-18.
- 17 projects worth Rs. 71,596.36 Cr likely to be completed in FY 2018-19 & beyond (including Nagyalanka)

In totality, there are 14 development and 17 infrastructure projects at various stages of implementation. Total approved cost of 14 development projects is Rs.76926 Cr and of the 17 infrastructure projects is Rs. 14021 Cr. The summary of some present and future projects is as under:

(a) Approved Field Development / Redevelopment schemes/ Enhanced Oil Recovery schemes:

S.No.	Projects	Approved Cost (Rs. Cr)	Oil gain, (MMt) (Over profile period)	Gas gain (BCM) (Over profile period)
1	Development of C-26 Cluster Fields	2592.17	0.644	5.94
2	Integrated Development of Vasistha & S-1 Fields	4259.49	0	15.96
3	MH North Redevelopment Ph-III	5813.25	6.99	5.252

4	Integrated Development of B-127 Cluster Fields	2665.65	1.99	4.676
5	Development of Western Periphery of MH South Field	600.17	1.031	0.214
6	Field Development Plan of MADANAM NELP Block CY-ONN-2002/2-	390.52	1.048	2.702
7	Enhanced Recovery of Bassien field through Mukta, Panna formations	4619.94	0.183	18.83
8	MH South Redevelopment Ph-III	6068.8	7.547	3.864
9	Redevelopment of Gamij field	1881.22	3.79	0.356
10	Daman Development Project	6086.08	5.01	27.67
11	Field Development Plan of CBM Bokaro	658.62	0	4.098
12	Neelam Redevelopment Plan for Exploitation of Bassein & Mukta pay-Neelam field	2818.88	2.76	4.786
13	North Kadi Redevelopment	249.6	1.391	--
14	Heera Redevelopment PH-2	5608.40	13.36	1.665
15	Development of WO-16 Cluster Fields	2523	2.83	8.58

(b) Under approval and known to be viable field Development / Redevelopment schemes:

S.No.	Project/Field Title	Estimated Project cost (Rs in Cr)	Oil gain (MMT)	Gas gain (BCM)
1	4th Phase of Development of NBP field, B&S Asset (NBP 20)	995	2.083 by 2031-32	-
2	Development of B-147 field	546.15	0.489 by 2029-30	0.708 by 2029-30
3	Development of BSE-11 block	511.3	0.567 by 2030-31	0.565 by 2030-31
4	Comprehensive development of NBP field	591.35	1.78 by 2028-29	-
5	Heera Redevelopment Phase-III (HRP-III)	2240	4.750 MMt by 2034-35	0.590 BCM by 2034-35
6	Development of R-Series Fields including Revival of R-12 (Ratna)	4007	7.03 MMt by 2035-36	0.88 BCM by 2035-36
7	Mumbai High Redevelopment Phase-IV	5859	7.354 MMt by 2029-30	2.035 BCM by 2029-30

8	Development of KG-DWN-98/2- Cluster- I	744.12 MMUSD	2.03 MMt	11.82 BCM
9	Nagyalanka (PH-1)	CAPEX : 86.92 MMUSD, OPEX: 43.44 MMUSD,	0.429 (3.488 MMSTB)	0.22 (7.818 BCF)

Besides, ONGC is actively participating with OIL in two projects monitored by DGH. These two projects by GoI will help in increasing India's Hydrocarbon Production.

(c) Re-assessment of Hydrocarbon Resources of India in all 26 sedimentary basins including deep-waters:

As on 22.02.2017, the re-assessment exercise of study for Satpura-South Rewa-Damodar, Bastar, Chattishgarh, Vindhyan, Kerala-Konkan Mahanadi, Rajasthan, Spiti-zanskar and Mumbai Offshore basins has been completed and draft report is prepared. Recently, study for Karewa basin has also been completed. Presently, the study of 12 sedimentary basins is in progress at eight work centres of ONGC. The work has been reviewed by international domain expert. The suggestions given by experts are being incorporated in the study.

(d) Survey of un-appraised areas:

Under this project, ONGC has been mandated to conduct 2D seismic API of 40835 LKM in **un-appraised areas** in 11 onshore sectors of different sedimentary basins of India. The data acquisition has been started and as on 22.02.2017 about 3477 LK of 2D data has been acquired in 7 sectors.

(B) The steps being taken by OIL –

In order to take the vision forward, Oil India Limited (OIL) has prepared a detailed plan to improve its production in order to contribute to the vision of reduction in import dependency in energy by 10% by 2021-22.

OIL is carrying out exploration and production of oil and natural gas during the last few decades with its operational headquarters in Duliajan, Assam. The main operating and producing areas of the company at present is in Assam and Arunachal Pradesh referred as Main Producing Area (MPA). Though OIL is the operator in most of the area, a small oil and gas field in Arunachal Pradesh (Kharsang) is operated by a Joint Venture in which OIL has participating interest. Apart from North East, OIL is also producing gas from small gas field in Rajasthan since 1996. During 2015-16, OIL has produced 3.2466 MMT oil and 2.838 BCM gas. In addition to producing assets, the exploration acreages of OIL include 10 active NELP blocks spread over India, 1 Pre NELP JV (Dirok) and 5 PEL in Assam and Arunachal Pradesh.

(a) Key Initiatives & Road Map to Achieve Target Oil Production

OIL intends to achieve its projected oil production targets mainly by development drilling in newly discovered areas & redevelopment of mature fields with infill

drilling, arresting decline of existing fields through various IOR-EOR activities & well interventions, exploratory drilling in nominated areas as well as removing surface bottlenecks / facilities infrastructure creation. The key initiatives & road map to achieve the projected oil production targets are as follows:

(i) Development drilling:

A major contribution to oil production is expected to come from development/in-fill drilling. During mid-2015, drilling of about hundred and three (103) development locations in next seven (7) years were planned till 2021-22. Thereafter, a total of twenty four (24) development wells have been drilled so far and the remaining seventy nine (79) are expected to be drilled till FY22.

The main areas for development drilling are Makum-Hapjan, Baghjan, Barekuri, Balimara, South Baghjan areas, where a total of forty six (46) nos. of wells are planned to be drilled. In addition, the development drilling will be carried out in smaller to medium sized structures like Bordubi, Matimekhana, Rajgarh, Nadua, Kharikatia, East Khagorijan, West Zaloni etc., where a total of twelve (12) nos. of wells are planned to be drilled. Additionally, about 10 nos of development locations are expected to be drilled till FY'22 in newly discovered areas.

(ii) Exploratory drilling:

In main producing area (MPA), exploration activities constitute identification of new prospects in new area and identification of prospect in existing areas. At present OIL holds 4543.5 Sq.km of mining lease and three (03) PELs with 331 sq.km areas for exploration. At present about 42 Nos. of exploratory locations are released and available for drilling. Out of these forty two (42) locations, land is acquired or released for pre-drill activities for 23 nos of exploratory locations. These locations lie in areas like Lohali, Umatara, Makum, Kharikhatiya, Nadua, South Baghjan, Barekuri, Jagungaon, Duliagaon, Mahakali etc. Moreover, additional exploratory locations will be generated through ongoing geoscientific studies.

Several exploratory locations are lined up for drilling in Kharsang, Baghjan Reserve Forest, South Baghjan, Kumchai, Safra-Sonari and Mechaki. However, Forest De-reservation approval and Wild Life Clearance is required to drill the locations in Jorajan, Kusijan & Mechaki areas and additionally approval of Mining Lease Grant from Govt. of Arunachal Pradesh is required for Kumchai area.

A belt covering Balimara, Tarajan and data-gap areas between Jorajan and Kusijan area are poorly covered with seismic data due to various surface logistics constraints. A seamless 2D seismic data with specialized processing will help in further exploration of this belt. 2D seismic in Tarajan area is already planned for FY'17. These areas are close to already discovered oil and gas field and in the vicinity of frontal Naga thrust and therefore has high potential of generating number of hydrocarbon prospects / drilling locations.

Exploration Success of these locations is likely to add to the oil production potential in MPA.

(iii) Redevelopment of Mature fields:

Makum-North Hapjan: Makum-North Hapjan is one of the major fields of OIL, contributing around 40% of total crude oil production of OIL. In an effort to prolong the plateau production and to increase the recovery factor, several key steps are being taken. OIL has very recently signed an MOU with the University of Houston, USA for R&D efforts in its areas of operation for a five year period. As part of the technical collaboration, this area has already prioritized and been taken up for study. The Phase-1 of the study is expected to be completed by July'17 which include recommendations towards quick win in production, identify and provide tangible suggestions on existing set-up of surface facilities to remove bottlenecks to improve production performance and arrest the decline.

Digboi oilfield: Digboi oilfield is one of the oldest oil fields in world discovered in 1889. In order to enhance production (oil/gas/condensate) / recovery, the redevelopment of the field is being studied under technical collaboration with M/s BELORUSNEFT, Republic of Belarus through MoU. The study is expected to be completed by July'17.

(iv) Arresting decline in existing fields with IOR-EOR activities & well interventions:

The major contribution of oil is from old matured fields, which require various well interventions as well as IOR-EOR activities in order to arrest the decline in production. The various production enhancement measures being implemented in the fields are:

- **Increasing Workover Rig resources:** Increasing the fleet of workover rigs from current level of 22 to 25 to carryout workover /well interventions in more no. of sick/non flowing wells.
- **Enhancing water injection:** So far, around 298 MM kls of STOIIP (Stock Tank Oil Initially-in Place) have been subjected to Water Injection representing 27 reservoirs and current water injection rate is around 8600 klpd. Recently, water injection is started Kamkhat-1 block, Makum-North Hapjan & Shalmari Barail 3rd Sand reservoirs. The surface infrastructure for initiating water injection in Dikom-Chabua field and Moran field is in progress. Apart from on-going water injection projects, three new reservoirs are currently being reviewed for possible implementation of water injection.
- **Chemical Water shut-off:** To arrest the increasing trend of water cut, implementation of chemical water shut off technology is currently underway in seven (7) number of wells in Bhogpara and in a couple of other Eocene wells with assistance from IRS, ONGC, Ahmedabad.
- **Radial Drilling Technology:** To increase the locked-up Potential from the premature shut-in wells, OIL has applied radial drilling technique recently in four number of wells with gain of around 25klpd oil. In view of the encouraging results

in the 1st campaign, 14 more wells have been identified to be completed with radial drilling technology.

- **Hydraulic Fracturing:** To increase production from tight / low permeable sands, Hydraulic fracturing has been done in 10 wells with gain of around 190 klpd oil & 50,000 gas. Hydraulic fracturing will be done in more wells with low permeable sands.
- **Matrix Acidization:** OIL has initiated to carry out matrix acidization, for improving flow by removal of near wellbore damage, in around 100 wells, including oil producers, water injectors, and water disposal wells. Currently around eighteen (18) wells have been successfully completed.
- **Gravel Pack:** Sand ingression has become a major issue in reducing crude oil production in OIL's major oilfield like Makum & Hapjan and gas fields like Lohali, Deohal etc. Gravel pack campaign for a total of twenty (20) nos. of wells has already been initiated. Six (6) wells have been successfully gravel packed till date.
- Installation of ESP and Gas lifts for facilitating artificial lift on regular basis.
- **EOR activities:** Since OIL is producing most of its crude oil and natural gas from matured reserves; it is strongly contemplating implementation of EOR activities in order to increase its production and reserves. In this line a number of new projects and studies for EOR have been taken up such as studies on Alkali Surfactant Polymer (ASP) Flooding, Carbonated Water Injection as a Joint Industry Project with Herriot Watt University, and other projects in collaboration with University of Houston.
- In Baghewala field located in Rajasthan, the Pilot project to produce heavy oil from Baghewala field through chemical & thermal EOR method is in advanced stage. Two drilling locations (one Horizontal and one vertical) are released and will be produced initially through chemical stimulation followed by thermal Cyclic Steam Stimulation. The production from the pilot project is expected by March'18. Upon successful completion of the pilot project, full field scale heavy oil development plan will be executed, which may further contribute to oil potential of the company.

(v) New Surface Production facilities / debottlenecking of existing facilities:

OIL has initiated a number of projects for creating surface infrastructures for production and transportation of oil. The major projects are:

- Construction of Group Gathering Station (GGS) at Baghjan field having handling capacity of 1800 KLPD oil and 2.5 MMSCMD of gas. The project is expected to be completed by mid of 2019.
- Construction of Group Gathering Station(GGS) for handling produced oil and gas in East Khagorijan area. Construction of 200 mm (8") NB oil pipeline from GGS to Dikom OCS for evacuation of crude oil. A 400 mm (16") NB gas evacuation line also shall be constructed side by side to bring the gas to the main network. The project is expected to be completed by 2020-21.

- Laying of Sapkaint to Shalmari- Moran CoD Pipeline 150mm (6“) NB Hook-up point. The project is expected to be completed by end of 2017.
- Laying of Balimara-- Jaipur OCS COD Pipeline 150mm (6”) NB X 7.5 Km. The project is expected to be completed by end of 2017.
- Construction of Secondary Tank Farm (STF) with dehydration & effluent water treatment facilities to maintain crude oil production during Refinery shut down & Pipeline maintenance for about five days. The project is expected to be completed by 2018-19.
- The capacity of intermediate tank farm at Tengakhat will be augmented by 40,000 kls. It will enable OIL to maintain crude oil production during any Refinery shut down & Pipeline maintenance job. The project is expected to be completed by 2017.
- To strategically manage increasing volumes of produced water and increase the longevity of the producing wells, an initiative to carry out Produced Water Re-injection (PWRI) is also being envisaged. To ensure compliance of stipulated guidelines and maintain parameters of produced water prior to disposal or re-injection back into reservoir, produced water **Effluent Treatment Plant (ETP)** of capacity is 5000 Cubic meter per day will be constructed. The same is expected to be completed by 2019-20.

(b) Key Initiatives & Road Map to Achieve Target Gas Production

OIL has planned to increase 30.4 % in gas production by the end of 2021-22 from its current level of production in 2015-16 to reach the level of 3.7 BCM as stipulated in Committee’s report. This growth in gas production is achievable with the creation of new surface facilities / infrastructure for seamless gas transportation.

The major contribution of the projected gas production will be the associated gas with oil corresponding to the Gas-oil Ratio (GOR) of projected oil production. The gap between projected gas production and associated gas will be bridged based on current gas reserve estimates for which suitable surface facilities are required for ensuring gas transportation. OIL has already initiated a number of projects for creating infrastructures for production and transmission of natural gas. The major initiatives & road map to achieve the projected gas production targets are as follows:

(i) Lohali-Deohal Area

- Lohali-Deohal area is presently contributing gas @ ~ 1.7 MMSCMD through 10 wells. The production potential of the wells are even more, however their production is limited due to facilities constraints of separator capacity (~1.8 MMSCMD) as well as due to sand ingression issues.

- To eliminate sand production from the wells, gravel pack has been implemented in majority of the wells and remaining wells are planned to be gravel packed by February 2018.

- Augmentation of gas handling capacity of Deohal Field Gathering Station by additional capacity of 1.0 MMSCMD to handle increased production of gas from Deohal field. This project is expected to be completed by March 2017.

- With augmentation of gas handling capacity of Deohal Field Gathering Station and gravel packing of the wells, 0.6 MMSCMD additional gas potential increase is expected by 2017-18.

(ii) Barekuri Area (Narpuh Sand Development)

- With discovery of commercial gas in Narpuh sand in Barekuri area, potential of increase in gas production from Barekuri area exists. Presently 2 wells are producing from this reservoir; however production is limited due to limitations in gas transportation facilities.

- Four development locations have been released for the development of this reservoir for which survey activities for acquiring land for drilling locations is in progress. The drilling locations are expected to be drilled by mid 2019.

- For evacuation of gas produced in Barekuri field, construction of Gas Transmission Pipeline of size 10” NB (dia) X 11 Km (long) from Barekuri field to Makum is expected to be completed by mid of 2018.

- Construction of Gas Transmission Pipeline of size 16” NB (dia) X 20 Km (long) from Makum area to Central Gas Gathering Station for evacuation of gas produced in Barekuri area and Greater Hapjan Areas is expected to be completed by mid of 2019.

- Expected gas potential after completion of this project is around 1.00 MMSCMD by mid 2019.

(iii) East Khagorijan – Rangmala – Nadua field Development

- Presently, the oil production of East khagorijan is transported through bowsers and the gas produced is flared. In addition, nearby Rangmala gas discovery is not monetized yet due to lack of pipeline infrastructure.

- For evacuation of oil & gas of East Khagorjian, Rangmala and other future locations in these areas, Group Gathering Station (GGS) for handling produced oil and gas will be constructed.

- Construction of 200 mm (8”) NB oil pipeline from GGS to Dikom OCS for evacuation of crude oil & construction of 400 mm (16”) NB gas pipeline from GGS to Chabua for evacuation of gas to be completed.

- The project is expected to be completed by 2020-21 with anticipated gain in gas production of about 0.3 MMSCMD.

(iv) Baghjan Area

- With discovery of commercial gas in Narpuh sand in Baghjan area, potential of increase in gas production from Baghjan area exists. Presently 1 well is producing from this reservoir. In addition to that, other gas reservoirs are present

which are currently producing with limited production due to the limitations in gas transportation facilities.

- Geo-scientific study is under progress for development of Narpuh Sand gas reservoir, which is expected to be completed by mid 2017. The development location is expected to be completed by 2020-21.

- Construction of Group Gathering Station at Baghjan field having handling capacity of 1800 KLPD oil and 2.5 MMSCMD of gas. The project is expected to be completed by mid of 2019.

- Construction of gas transmission pipeline of size 900 mm NB (dia) x 52 Km (length) from Baghjan Group Gathering Station to Central Gas Gathering Station, having maximum gas transmission capacity of 5.00 MMSCMD approximately. The project is expected to be completed by 2020.

- With facilities in place and drilling of new wells, expected increase in gas production potential is about 1.00 MMSCMD.

(v) Other Areas

- Construction of Gas Transmission Pipeline of size 10” NB (dia) X 26 Km (long) from Moran Field to Shalmari for evacuation of gas produced in Moran field. The project is expected to be completed by December, 2017. Expected increase in gas production potential is about 0.15 MMSCMD.

- In Dandewala gas field in Rajasthan, the gas production potential has been enhanced with the recently drilled new development wells as well as workover campaign. However, the gas production is limited due to less offtake by consumer than the contractual rate 0.7 MMSCMD. The effort is being made to enhance the quantity of sale gas through new contract.

The gas potential gain from above projects will help in managing shortfall in gas production from other fields of OIL. It is envisaged that all requisite clearances such as EC, FC, NBWL, DGMS etc. will be available in time with necessary support from appropriate authorities / statutory bodies".

1.54 On the efforts made by ONGC to increase the domestic production of Oil and Gas, the CMD, ONGC during oral evidence submitted the following:

"...Sir, under Urja Sangam, whatever hon. Prime Minister has given the target of reducing ten per cent imports on hydrocarbons, the Ministry has constituted a Committee and they have said in their report about the sources where this reduction will come about. Now, certain targets have been assigned to the ONGC in that report for oil and gas. Now, ONGC in turn has been working parallel and they have finalised the fields. We have gone field by field, discovery by discovery, and studied that this increase will come from which fields, etc. The whole document has been prepared and in the first week of March, we are

launching this document. Hon. Chairman was referring to some OANGC event in the first week of March. This is the same event. We will be launching this document. This is the reply in general.

Coming to certain specific points, Secretary also mentioned that some Rs. 34,000 crore of investment is to happen in our field, 98/2, which is called KG 98/2.

This gas production is expected to start in July, 2019 and oil gas production is going to start in April 2020. From a single project, the total amount of gas which we would be producing is expected to be 27 per cent of the ONGC's current gas production and at its peak level would be 17 per cent of the ONGC's current oil production. Here I talked only of Cluster II. Cluster III is also there. In Cluster III we have already started working. I hope by the beginning of the next year, we should be able to finalise the investment plan for Cluster III also which is south of Cluster II and it is much deeper than Cluster II. The confidence level was low. But after talking to the experts globally, we have the confidence that we can do that. About 60 per cent of the total ONGC's gas production will come from Cluster II and Cluster III. ONGC's current gas production is about 65 million cubic meter per day or so. Now, the amount of investment decisions which we have already taken, plus the Cluster III which I just mentioned, the total peak production from all these decisions and would be decisions is expected to be about 80 million cubic meter per day. So, that means, 60 per cent is from the 98/2, which I just mentioned and more than 40 per cent from others. So, the potential of this is going to double. After having said so, the things may not be as rosy as I am just saying because in the western offshore we have a field. This field is quite old. We started production in this field in the late seventies and this field has become very old. So, the production is depleting. But still the production of gas would be substantially more in the years to come. Mr. Secretary has very correctly said that gas is easier but oil is a little difficult. But even in oil the investments which we have already approved amounts to 223,000 barrels per day of peak production from all these approved projects, which are in pipeline, which is about 11 million which is equivalent to almost 45 per cent of ONGC's current production. So, we are working on this. Once we launch this document, I think, all these stakeholders including the respected Committee also will have more confidence in ONGC's initiative to increase oil and gas production".

1.55 Supplementing further, DGH made the following observations during the oral evidence:

"... Mr. Chairman is rightly concerned that most of the increase to match the requirement of ten per cent has to ultimately come from production of both oil and gas. Also the stress is now to convert, take us from 7 per cent of energy consumption to about 19 per cent in the times to come. As per the plans that exist today, our oil production would more or less constant in the near future, may be up to 2020 and thereafter with some additionalities. I will not add to what the CMD, ONGC has already mentioned. But on the eastern coast, we will also

have very substantial addition by private players, namely Reliance and also from the GSPC fields. Similarly, there is likely to be further addition down the Cauvery coast.

....Keeping that in mind, from the present level, we are likely by 2021-22, of roughly about 19 MMCMD we would be reaching a level of about 170 to 180 MMCMD of domestic production of gas. It is on the basis of field development plans which have already been approved or likely to be approved in the very near future. We are not adding future discoveries. Even we have not added into this the number that could be brought in by the discovered small field which has been recently awarded which we expect at least 2 to 4 MMCMD of gas to come. We also expect a lot of gas which has been stranded due to pipelines not being extended and the pipelines would reach them. We also are expecting and it is due to happen very soon that our production of CBM which is at the level of one to 1.5 MMCMD today will go to about 5 to 5.5 MMCMD and by 2021-22 it may reach a level of 10 MMCMD. I have not added shale gas production. A lot of people are already experimenting with it. Some policy reforms are needed".

1.56 The Committee noted that ONGC is planning to acquire assets of GSPC When asked on the purchase of GSPC's assets in KG-D6 basin by ONGC, the Ministry have submitted the following details:

"Block KG-OSN-2001/3 was awarded under NELP-III round and its PSC was signed on 04.02.2003 which is effective from 12.03.2003 being the PEL grant date. The contractor currently comprises of Gujarat State Petroleum Corporation Ltd (GSPC) (with 80% PI and Operatorship), Jubilant Offshore Drilling Private Limited (JODPL) (with 10% PI) and Geo Global Resources (India) Inc. (GGR) (with 10% PI and carried by GSPC). The contractor consortium executed the JOA on 07.08.2003. The present area of the block comprises 37.5 km^2 under the Mining Lease (ML) and 493 km^2 under the Petroleum Exploration Licence (PEL).

Exploratory efforts in the block have resulted in nine gas discoveries, 3 of which comprise the Deen Dayal West (DDW) Field development, which approved on 04.11.2009, is under implementation. For the remaining 6 discoveries an integrated FDP is under preparation.

GSPC offered ONGC 50% PI & Operatorship on commercial terms and subsequently offered its entire 80% stake in the block. ONGC carried out technical, financial and legal due diligence using both in-house expertise and engaging services of external agencies.

The 287th Board approved acquiring the offered 80% PI and operatorship from GSPC at a purchase consideration of US$ 995.26 million for DDW Field in the Block. ONGC also decided for an advance payment of US$ 200 million to GSPC in respect of future consideration for six discoveries other than DDW Field, which will be adjusted upon valuation of the these discoveries subsequent to

approval of their Field Development Plan by Management Committee of the Block.

A Farm-in/Farm-out agreement between ONGC and GSPC was finalized keeping in view the findings of the technical, financial and legal due diligence and the commercial negotiations between the parties after several rounds of discussions and legal due diligence. The Farm-in /Farm-out agreement sets forth the modalities to be followed to effect the assignment of PI and change of Operatorship with the approval of the Government as per the existing Production Sharing Contract (PSC) and Joint Operating Agreement (JOA) of the block.

The finalized Farm-in/Farm-out Agreement between ONGC and GSPC has been considered by the ONGC Board in its 290th meeting held on 23.02.2017.

A stake acquisition by ONGC in the block fits well with the strategy of ONGC to enhance natural gas production from domestic fields on a faster pace, more so with a goal to reduce import dependency in energy by 10% by year 2021-22. The trial gas production from DDW Field has begun in year 2014. Upon successful completion of the deal, ONGC shall endeavour to bring the field on commercial production. Through successful exploration efforts of ONGC, an HP-HT corridor of oil and gas is emerging in Krishna Godavari Basin. The DDW Field is envisaged to act as a pivot in developing nearby HPHT discoveries in Yanam and Godavari PML areas of ONGC. ONGC also finds opportunity to bring the Cluster-I gas discoveries of KG-DWN-98/2 NELP Block and adjacent nomination blocks on a fast track development through utilization of the existing infrastructure of the DDW Field. The engagement between ONGC and GSPC sets a pioneering example of synergy of strategies of Government owned companies in upstream sector of oil & gas industry".

L. HYDROCARBON EXPLORATION AND LICENSING POLICY (HELP)

1.57 On being asked to furnish details on the new licensing regime named HELP and the status of awarding of exploration blocks under HELP, the Ministry have submitted the following information:

"Government of India vide resolution No.O-32011/4/2013-ONG-1 dated 30.03.2016 introduced a new licensing policy for exploration of hydrocarbons in the country. The policy has been named as **'Hydrocarbon Exploration and Licensing Policy (HELP)**. The salient features of HELP are as under:

- Single License for Conventional and Non-conventional Hydrocarbons
- Marketing and Pricing freedom
- Changed Fiscal Regime from PSC to Revenue Sharing model
- Open Acreage Licensing Policy(OALP)
- 100% foreign direct investment is allowed.

- The Royalty rates under HELP are as under :

Blocks	Duration	Royalty rates	
		Oil	Gas
Onland	-	12.5%	10%
Shallow Water	-	7.5%	7.5%
Deep Water	First seven years	No Royalty	No Royalty
	After Seven years	5%	5%
Ultra Deep water	First seven years	No Royalty	No Royalty
	After Seven years	2%	2%

- Exploration Period will be 8 (eight) years for onland and shallow water blocks, however, in order to encourage exploration in Deep Water, ultra Deep water nad frontier blocks the exploration period will be 10 years.
- Blocks will be awarded based on 100 points. The points will be awarded on the basis of revenue share being offered to the GOI and committed biddable minimum work programme (MWP) with weightage of 50 points each.
- Exemption from custom duty will be provided on all machinery, plants, equipment, materials and supplies related to petroleum operations.
- Management Committee constituted of GOI and contractor will be largely related to monitoring of Minimum Work Programme and technical aspects.

The award of the blocks has not yet taken as the process of finalization of Draft Model Revenue Sharing contract, process of operationalization of OALP and Notice Inviting Offer are underway. Once these are finalised and approved, process of launch of HELP round will commence".

1.58 On being asked about the auction of oil blocks likely under HELP, the Ministry have stated as under:

"The process of finalization of Model Revenue Sharing contract, operationalization of OALP and Notice inviting Offer are underway. Once these are finalised and approved, process of launch of HELP round will commence".

1.59 When asked as to whether new licensing policies have had any serious impact on exploration and production activities in the country, the Ministry have stated as under:

"On implementation of recently launched policies, it is expected that the impact on exploration and production activities in terms of hydrocarbon discoveries, reserve accretion and production thereof will be positive".

1.60 When asked about other policy initiatives of the Government for extraction of oil and gas from complex environments like deep-water, high pressure and high temperature areas, the Ministry have provided following details:

"In a major Policy drive to give a boost to petroleum and hydrocarbon sector, the Government has unveiled a series of initiatives. The reforms in hydrocarbon sector are based on the guiding principles to enhancing domestic oil and gas production, increasing investment, generating sizable employment, enhancing transparency and reducing administrative discretion. Government has formulated path breaking policies to revolutionize the E&P sector which inter-alia includes –

- Gas Pricing Reforms
- Discovered Small Field Policy
- Reform Initiatives to Enhance Domestic Production
- Hydrocarbon Exploration and Licensing Policy (HELP)
- Monetization of the Ratna offshore field
- Permission of Extraction of CBM to Coal India Limited (CIL) & its subsidiaries in coal Mining area.
- Hydrocarbon Vision 2030 for North East
- National Seismic Programme of Un-appraised areas
- National Data Repository (NDR)

Government has formulated path breaking policies to revolutionize the E&P sector. The Policy-wise details have been enumerated as under:

Gas Pricing Reforms

Government approved the New Gas Pricing Formula in October, 2014 leading to resolution of this long pending issue. The new gas pricing guidelines has struck a fine balance between the requirements of both producing and consuming sectors. To incentivize gas production from difficult areas such as High Pressure High Temperature (HPHT) reservoirs and deepwater and ultra deepwater areas, government has given marketing and pricing freedom. The marketing freedom so granted would be capped by a ceiling price arrived at on the basis of landed price of alternative fuels. The reserves which are expected to get monetized are of the order of 6.75 Trillion Cubic Feet (TCF) which is valued at around Rs150,000 Cr at the present gas price.

Discovered Small Field Policy

The bidding round under the Discovered Small Field Policy launched on 25th May 2016 in New Delhi thereby offering 67 discovered small fields in 46 contract areas of ONGC and OIL for international bidding. This is the first round of bid in last 6 years.The policy aimed at monetizing these discoveries in a time bound manner to boost domestic production of Oil and Gas. In tune with minimum government-maximum governance, the policy is packed with all possible reforms in the E&P sector such as uniform licensing, pricing and marketing freedom, easy to administer revenue sharing mechanism etc. The policy enables and provides attracting features for start-ups to invest in monetizing these fields. The response from the stakeholders is very encouraging and would lead to monetization of reserves worth Rs 70,000 Cr thereby increasing the domestic production and government revenue through royalty and revenue sharing mechanism. In order to promote investment and attract the investors Road shows were organized in

Mumbai, Guwahati, Houston, Calgary, Dubai, Singapore, London and Bangalore. During the Road Shows interactive meets were held with the CEOs of prominent industries and prospective bidders. 134 bids for 34 contract areas were received from Indian and foreign joint venture companies on the bid closing date of 21st November, 2016. Out of which, 31 contract area are likely to be awarded in 2017 subject to Government approval.

Reform Initiatives to Enhance Domestic Production

To ease out rigidities in the functioning of PSC regime Government approved Policy Framework for Relaxations Extensions and clarifications for early Monetization of Hydrocarbon Discoveries. These reforms have helped in moving ahead with discoveries with associated reserves of around Rs. 30,000 Cr and have also helped in resolving around 40 pending issues in different contracts. Government has approved a policy on Testing Requirement in NELP blocks to resolve existing dispute on this issue and provide clarity for future. This initiative has helped in monetization of resources of the order of Rs 75,000 Crore. Government approved a policy for grant of extension to the Production Sharing Contracts for small and medium sized discovered fields. The policy provides clarity to investors for planning their investments and would help in monetization of resources of the order of Rs. 50,000 Cr in the extended period.

Hydrocarbon Exploration and Licensing Policy (HELP)

- A new and path breaking model for attracting investment in the E&P sector in tune with the principle of ease of doing business for forthcoming biding rounds.
- **Single License** for exploration and production of conventional as well as non-conventional Hydrocarbon resources.
- **Open Acreage Licensing Policy**-option to select the exploration blocks without waiting for formal bid round.
- **Revenue Sharing Model**-simple, easy to administer- no cost recovery - no micro-management by the Government - operational freedom to the operator.
- **Pricing and Marketing Freedom**- a major incentive for investment.
- **Reduced rate of royalty** for offshore blocks.
- Ushering new era in the E&P sector of the country. The policy has been welcomed by all stakeholders.

Monetization of the Ratna offshore field

ONGC has initiated necessary action for development of this field after cancellation of letter of award to Essar Oil Limited and Premier Oil Limited. ONGC will be able to bring the field back to production in four years time and achieve a rate of production of 3300 BOPD. With this the Rs.26,200 crore resource will be unlocked. Government will also earn revenue to the tune of Rs. 8,000 crore through cess and royalty.

Permission of Extraction of CBM to Coal India Limited (CIL) & its subsidiaries in coal Mining area.

Government has permitted Coal India Limited (CIL) & its subsidiaries to undertake CBM operations in the coal mining lease areas held by them. This decision will not only help augmenting CBM gas production in the country but will also make the mines safe for operations.

Hydrocarbon Vision 2030 for North East

The Vision aims at doubling Oil & Gas production by 2030, making clean fuels accessible, fast tracking projects, generating employment opportunities and promoting cooperation with neighbouring countries and targets an investment of Rs.1.30 lakh crore till 2030 in North East India.

National Seismic Programme of Un-appraised areas

Almost half of the India's Sedimentary areas are yet to be appraised. Government of India has taken up an ambitious programme of undertaking 2D seismic survey of entire un-appraisal areas with an estimated expenditure of Rs.5000 crore. National seismic programme was launched on 12th October 2016".

1.61 When asked about the amount of oil and gas production added to the production of PSUs from new discoveries during last year, the Ministry have stated as under:

"ONGC

The contribution from new hydrocarbon discoveries by ONGC during last year during 2015-16 is as under:

	Crude Oil Production (MMT)	Natural Gas Production (MMSCM)
Onshore	0.276	289
Offshore	3.354	3587
ONGC	**3.630**	**3876**

OIL

The amount of oil and gas production added to the production of OIL from new discoveries during the last financial year (FY 2015-16) was 9949 kilo litres of crude oil and 44649 cubic metre of natural gas".

1.62 When the Committee asked about the incremental increase in production of upstream oil companies due to IOR/EOR projects, the Ministry stated as under:

"ONGC

As regards ONGC, the details of Improved Oil Recovery (IOR) / Enhanced Oil Recovery (EOR) and redevelopment schemes of ONGC along with envisaged / cumulative incremental oil and gas gain up to December 2016 are as under:-

IOR / EOR / Redevelopment projects

Sl. No.	Name of the scheme	Date of project completion/ Sch. Compl.	Envisaged incremental Oil Gain (MMT), Gas gain (BCM)	Cumm. incremental Oil Gain (MMT), Gas gain (BCM) upto Dec'16	
				Plan	Actual
Completed Projects					
1	Additional development of Heera Part-I	November 2003	Oil - 3.19, Gas - 0.55, by 2020	Oil-2.940 Gas-0.508	Oil-1.105 Gas-0.235
2	IOR Neelam	June 2005	Oil - 2.06, Gas - 1.235, by 2020	Oil-1.951 Gas-1.294	Oil- 2.842 Gas-1.271
3	Mumbai High North redevelopment	December 2006	Oil - 23.25, Gas - 6.10, (Revised) by 2030	Oil-17.746 Gas-4.932	Oil-17.695 Gas-5.111
4	Mumbai High South redevelopment	May 2007	Oil-33.85, Gas-10.26, (Revised) by 2030	Oil-26.422 Gas-8.263	Oil-29.433 Gas-9.676
5	Additional Development of A1 Layer L-III Reservoir.	March 2008	Oil - 3.49, Gas - 0.79, by 2030	Oil-2.738 Gas-0.630	Oil-3.453 Gas-0.609
6	Additional development of Heera Part-II and exploitation of free gas from Bandra formation	December 2008	Oil -2.645, Gas - 3.753, by 2020-2021	Oil-1.937 Gas-3.625	Oil-2.423 Gas-1.996
7	Redevelopment of Heera& South Heera Phase-I	November 2011	Oil-10.685, Gas-2.265, by 2030	Oil-7.543 Gas-1.981	Oil-6.311 Gas-1.606
8	Mumbai High South Redevelopment Project Phase-II	June 2014	Oil – 18.31, Gas – 2.70, by 2029-2030	Oil-13.555 Gas-2.829	Oil-10.178 Gas-4.032
9	Mumbai High North Redevelopment Project Phase-II	June 2014	Oil – 17.354, Gas – 2.987, by 2029-2030	Oil-10.620 Gas-1.716	Oil-7.213 Gas-1.994
10	Redevelopment of Heera& South Heera fields Phase-II	August 2015	Oil -13.361, Gas - 1.665 by 2034-35	Oil-3.625 Gas-0.958	Oil-1.307 Gas-0.382
11	Balol EOR	November 2001	Oil - 6.520 by 2020	Oil-6.385	Oil-2.682
12	Santhal Infill	November 2003	Oil - 0.326 by 2013	Oil-17.096	Oil-8.402
13	Santhal EOR	December 2001	Oil -14.770 by 2020		
14	Sanand EOR	September 2002	Oil - 0.624 (Revised) by 2020	Oil-1.858	Oil-1.360
15	Jotana	October 2004	Oil - 0.915 by 2020	Oil-0.861	Oil-0.585
16	Gandhar	June 2005	Oil -4.338, Gas - 2.690 by 2020	Oil-4.065 Gas-2.523	Oil-4.903 Gas-3.352
17	North KadiPh.II	November 2006	Oil - 0.363 by 2018	Oil-0.349	Oil-0.578
18	North KadiPh.I	April 2007	Oil -1.097 by 2020	Oil-0.971	Oil-1.085
19	Sobhasan	May	Oil-1.194 by 2020	Oil-1.254	Oil-0.866

		2008			
20	Kalol	July 2010	Oil-2.656, Gas-0.460 by 2020	Oil-2.436	Oil-2.323 Gas-0.428
21	IOR Geleki	August 2013	Oil -4.761, Gas - 1.589 by 2023-24 (Revised)	Oil-2.897 Gas-0.988	Oil-2.246 Gas-0.757
22	IOR Lakwa –Lakhmani	September 2013	Oil -3.061, Gas - 0.361 by 2023-24 (Revised)	Oil-1.795 Gas-0.162	Oil-1.386 Gas-0.206
23	IOR Rudrasagar	March 2014	Oil – 2.507, Gas – 0.393 by 2023-24 (Revised)	Oil-1.301 Gas-0.208	Oil-0.685 Gas-0.172

Under implementation Projects					
1	Mumbai High North Redevelopment Project Phase-III	May 2017	Oil -6.997, Gas - 5.253 by 2029-30	Oil-1.785 Gas-0.881	Oil-1.021 Gas-0.235
2	Mumbai High South Redevelopment Project Phase-III	March 2019	Oil - 7.547, Gas - 3.864 by 2029-30	Oil-0.673 Gas-0.431	Oil-0.481 Gas-0.377
3	Development of Western Periphery of Mumbai High South field	May 2016	Oil -1.031, Gas - 0.214 by 2029-30		
4	Neelam Redevelopment Plan for Exploitation of Bassein & Mukta pay-Neelam field	May 2019	Oil-2.76, Gas-4.786 by 2034-35		
5	Gamij Redevelopment Project	Nov'2019	Oil-3.79, Gas-0.356 by 2032-33		

OIL

As regards OIL, the details of incremental oil production through Improved Oil Recovery (IOR) / Enhanced Oil Recovery (EOR)is as under:-

IOR/ EOR Oil production contribution for 2015-16 (MMT)	
Oil Production - Target	1.37
Oil Production - Actual	1.32

M. NEW EXPLORATION LICENSING POLICY (NELP)

1.63 Regarding the status of development of blocks awarded under NELP along with number of blocks where production work has started, the Ministry have submitted following details:

"The pace of exploration for oil and gas has increased after the introduction of NELP regime. The awarded 254 blocks are located in on-land (111), offshore shallow water (62) and deepwater (81) areas. Currently, 73 blocks are operational, 124 blocks have been relinquished, 50 blocks are proposed for Relinquishment and 7 blocks for which PEL are awaited. A total of 156

hydrocarbon discoveries, comprising of 58 oil and 98 gas discoveries, have been made in 52 blocks. Through these discoveries In-Place volume accretion of 916 Million Metric Tonnes (MMT) of oil and oil equivalent of gas (O + OEG) has been established as on 01.04.2016.The corresponding recoverable reserves is to the tune of 520.2 MMT (O + OEG). Till now, 19 discoveries in 11 blocks have been on production and 29 discoveries are under development. One producing block has been relinquished after production. The details are as under:

Block	Operator	Oil	Gas	Total
A. Discoveries which have been put on Production				
CB-ONN-2000/1	GSPC	3		3
CB-ONN-2000/2	Niko Resources Limited.		2	2
CB-ONN-2001/1	ONGC	1		1
CB-ONN-2002/1	ONGC	1		1
CB-ONN-2002/3	GSPC	2		2
CB-ONN-2003/2	GSPC	1		1
CB-ONN-2004/1	ONGC	1		1
CB-ONN-2004/2	ONGC	1		1
CY-ONN-2002/2	ONGC	1		1
KG-DWN-98/3	RIL.	1	2	3
KG-OSN-2001/3	GSPC		3	3
Total (A)		**12**	**7**	**19**
B. Discoveries which are under Development				
AA-ONN-2002/1	Jubilant Oil & Gas Private Limited.		1	1
CB-ONN-2000/1	GSPC	1		1
CB-ONN-2002/3	GSPC	6		6
CB-ONN-2003/2	GSPC	1		1
CB-ONN-2004/2	ONGC	2		2
CB-OSN-2003/1	ONGC		3	3
CY-ONN-2002/2	ONGC	1	1	2
KG-DWN-98/2	ONGC	5	3	8
KG-DWN-98/3	RIL		5	5
Total (B)		**16**	**13**	**29**
Total (A+B)		**28**	**20**	**48**

1.64 When asked about the actual investments in the IX round of NELP against the committed investment targets along with specific reasons for shortfall in the committed investments, the Ministry have intimated as under:

"Under NELP-IX bidding round, 34 exploration blocks were offered for bidding. A total of 19 blocks (4 in Western Offshore, 2 in Assam, 2 in Madhya Pradesh, 1 in Tripura, 1 in Rajasthan and 9 in Gujarat) have been awarded to various Public Sector, Private/Foreign Companies for which contracts have been signed.

As on 31.03.2016 US $119.31 million have been spent on exploration in blocks awarded under NELP IX against committed investment of US$ 733.66 million.

At present 12 exploration blocks are operational whereas two exploration blocks have been relinquished by the operators and PEL (petroleum Exploration License) is awaited for 5 exploration blocks).No oil or gas discovery has been made under exploration blocks awarded under NELP-IX bidding round.

On increasing exploration activities in the blocks, investment will increase accordingly".

N. DISCOVERED SMALL FIELDS POLICY

1.65 On being asked about the steps that have been taken for exploration and production from identified marginal or small fields, the Ministry have submitted the following information:

"Government of India launched the Discovered Small Field Bid Round- 2016 on 25th May 2016. Under the DSF Bid round, 67 fields clubbed under 46 contract areas were put on offer through International Competitive Bidding Round under Discovered Small Field policy with a prime objective to bring Discovered Small Fields to production at the earliest so as to increase the domestic production. Twenty six (26) Contract Areas are located in Onland, eighteen (18) Contract Areas are located in Shallow water offshore and two (2) Contract areas are located in Deepwater Offshore.

Bids were invited through online e-bidding portal. A total of 134 bids were received for 34 contract areas and no bid was received for 12 Contract Areas. Bids were scrutinized based on NIO terms & conditions and Net worth of the bidder as submitted online has been verified against actual documentary proof submitted.

The Bid Evaluation, NPV calculation and total marks obtained by Bidder was carried out online through MSTC e-biding portal. Blocks are likely to be awarded in 2017".

1.66 When the Committee asked about the status of oil blocks awarded under the policy relating to marginal fields, small fields, high temperature and high pressure areas, the Ministry have submitted the following information:

"Government of India launched the Discovered Small Field Bid Round- 2016 on 25th May 2016. Under the DSF Bid round, 67 fields clubbed under 46 contract areas were put on offer through International Competitive Bidding Round under Discovered Small Field policy. Twenty six (26) Contract Areas are located in Onland, eighteen (18) Contract Areas are located in Shallow water offshore and two (02) Contract areas are located in Deepwater Offshore.

Bids were invited on Single Stage, Two envelope system through online e-bidding portal. The First envelope contain all the bidders' documents/ information

required as per approved NIO except the Biddable Components and Second envelope has information of Biddable components, i.e. Biddable Work program and Biddable Revenue share of Government.

A Tender Committee comprising the officials in DGH was constituted for doing due diligence. A total of 134 e-bids were received for 34 contract areas (26 Onshore, 8 Offshore) and no bids were received for 12 contract areas. Physical supporting documents were submitted at DGH, and after evaluation of documents, it was found that 35 bids did not fulfill the Notice Inviting Offer (NIO) conditions. Biddable Components of 99 bids for 31 contract areas were opened electronically using digital signature of the Tender Committee members on 9th December, 2016. Out of 31 contract areas, 14 contract areas received single bid and 17 contract areas received multiple bids. Award of contracts has since been approved".

O. ETHANOL BLENDED PETROL PROGRAMME

1.67 Asked as to how much quantity of ethanol was procured for Ethanol Blended Petrol programme, the Ministry have submitted as under:

"During the ethanol supply year 2015-16 (from 1st December, 2015 to 30th November, 2016), a quantity of 111 crore litres of ethanol was procured by Oil Marketing Companies (OMCs). 7.6 crore litres has been procured for the ethanol supply year 2016-17 till 6th February, 2017".

1.68 Also, asked as to whether the procured volume during 2016-17 is sufficient for 10% blending of petrol, the Ministry have stated as under:

"OMCs have projected a quantity of 280 crore litres of ethanol to meet the 10% blending requirement. Accordingly, tender was floated to procure 280 crore litres of ethanol against which, a quantity of 78 crore litres could be allocated, based on the offers received. The main reasons cited by OMCs for lower offers by the Sugar Industry are lower cane production due to drought in Maharashtra and Karnataka, followed by demand from potable and chemical sector".

1.69 Further, when the Committee enquired as to whether alternative sources of ethanol for blending are being developed, the Ministry have submitted as under:

"On 10.12.2014, the Government allowed procurement of ethanol produced from other non-food feedstocks besides molasses, like cellulosic and ligno cellulosic materials including petrochemical route. In furtherance of this decision, Oil PSUs are establishing twelve 2G ethanol bio-refineries in 11 States. On 7.12.2016, MoUs have been signed between Oil Marketing Companies and Technology Providers / State Government for setting of 2G ethanol bio-refineries in five locations. On 25.12.2016, foundation stone of the first 2G ethanol bio-refinery by Hindustan Petroleum Corporation Limited in Bathinda, Punjab, has been laid".

P. BIO-FUELS

1.70 On being enquired with regard to the development of bio-fuels in the country, the Ministry have submitted the following information:

> "Looking at the country's ever-growing dependency on traditional fossil fuels, Bio-fuels seek to provide a high degree of national energy security in an environmental friendly, affordable and sustainable way by supplementing conventional energy resources, reducing dependence on imported fossil fuels and meeting the energy needs of India's vast rural population by use of non-food feedstocks. Considering India being endowed with significant potential for generating energy through renewable resources, Government launched EBP in India in 2003, which has extended to 21 States and 4 UTs. The immediate target is to achieve overall 5% blending in Petrol by blending up to 10%. The present policy allows ethanol to be procured from non-food feed stock like molasses, celluloses and lignocelluloses material including petrochemical route. Presently ethanol for EBP programme is coming from molasses route, a byproduct of sugar Industry.
>
> In order to augment the supply of ethanol, Government has taken many steps including fixing the delivered price of ethanol at Oil Marketing Depots (OMCs), simplifying the procurement procedures and regularly taking up State specific issues with the State Governments. These steps have resulted in significant improvement in the supply of ethanol to 111 crore litres during ethanol supply year 2015-16.
>
> For the ethanol supply year 2016-17, OMCs have floated tender for a projected quantity of 280 crore litres to blend 10% ethanol across depots in the notified States/UTs. The total allocated quantity based on 1st and 2nd round of December tender is 78 crore litres. Quantity supplied till 06.02.2017 is 7.62 crore litres.
>
> On 10th December, 2014 the Government allowed procurement of ethanol produced from other non-food feedstock besides molasses, like cellulosic and lignocelluloses materials including petrochemical route, subject to meeting the relevant BIS standards. Now, Oil PSUs are establishing twelve 2G ethanol bio-refineries in 11 States of the country. On 7.12.2016, MoUs have been signed between Oil Marketing Companies and Technology Providers/State Government for setting of 2G ethanol bio-refineries in five locations. On 25.12.2016, foundation stone of the first 2G ethanol bio-refinery by Hindustan Petroleum Corporation Limited in Bathinda has been laid.
>
> To encourage production of bio-diesel in the country, MoP&NG announced a Bio-diesel Purchase Policy, in October 2005, which became effective from 1st January 2006. Under this policy OMCs at 20 identified purchase Centres were required to purchase Bio-diesel (B100), meeting the fuel quality standard prescribed by BIS for blending with HSD to the extent of 5% across the country.

On 10th August, 2015, the Government has allowed sale of Bio-diesel (B100) by private manufacturers to bulk consumers. Also, retailing of bio-diesel blended diesel by Public Sector OMCs started on the same day".

1.71 The Committee asked about the details of twelve 2G ethanol bio-refineries along with the timelines of completion, estimated costs and projected production for which the Ministry have submitted the following information:

"Oil PSUs have decided to set up twelve 2G Ethanol Biorefineries at following locations across 11 States namely Haryana, Uttar Pradesh, Gujarat, Odisha, Maharashtra, Madhya Pradesh, Bihar, Punjab, Andhra Pradesh, Karnataka and Assam.

As per the Pre- Feasibility Report (PFR) prepared by Engineers India Limited (EIL) for 2G ethanol bio-refinery of HPCL, the projected investment for raising each Bio-refinery is around Rs 800 – Rs 1000 crores. Total investment for raising 12 such Bio-refineries is expected to be around Rs 10,000 crores. On completion of these projects, around 35 – 40 crore litres of ethanol is projected to be produced annually.

Oil PSUs are presently preparing Detailed Feasibility Report (DFR) for their proposed Bio-refineries. Actual timelines may only be ascertained after the completion of respective DFRs and requisite approvals for setting up the projects.

On 07.12.2016 in Petrotech-2016, Oil Marketing Companies entered into 6 MoUs with Technology providers (5 MoUs) and State Govt. (1 MoU) for setting up 2G Ethanol plants in first 5 locations viz. Dahej (Gujarat), Panipat (Haryana), Bina (M.P.), Bargarh (Odisha) and Bathinda (Punjab).

In furtherance of this, HPCL has laid Foundation Stone of their first 2G Ethanol Bio-refinery at Bathinda (Punjab) on 25th December, 2016".

Q. PROGRAMMES UNDERTAKEN BY DIRECTORATE GENERAL OF HYDROCARBONS (DGH)

1.72 When asked to furnish details regarding various programmes undertaken by the DGH in Indian sedimentary basins and re-assessment of hydrocarbon resources in the country, the Ministry have submitted the following information: National Seismic Program - 2D Seismic Survey of unappraised areas of onland Sedimentary Basin of India

"Out of total sedimentary area of 3.142 Million Sq. Km, an area of 1.502 Million Sq. Km is yet to be appraised. To appraise these areas, MoP&NG has formulated a plan to conduct 2D seismic surveys in all sedimentary basins of

India where no/scanty data is available. OIL has been assigned to carry out 2D seismic API of 7408 LKM falling in North eastern part of India covering states of Assam, Arunachal Pradesh, Nagaland, Manipur, Tripura and Mizoram and ONGC has been assigned to carry out 2D seismic API of approx. 40835 LKM seismic data in onland part of 22 sedimentary basins of India viz; Cambay, Kutch, Saurashtra, Rajasthan, Pranhita-Godavari, Krishna-Godavari, Cuddapah, Bastar, Cauvery, Vindhyan, Narmada, South Rewa, Satpura-Damodar and Chattisgarh, Bengal, Mahanadi-NEC, Ganga, Deccan Synclise, Bhima-Kaladgi, Himalayan Foreland, Spiti-Zanskar, Karewa and Andaman-Nicobar basins.

2D Seismic survey work has started & it will take five years to cover the entire area. The project will be funded by the Government through OIDB. However, the ONGC & OIL will incur expenditure upfront from its own resources and will seek reimbursement from the Government".

(i) Setting up of NDR (National Data Repository)

National Data Repository (NDR) has been set up to populate all the geo-scientific data available in the country. NDR Project is currently being expedited in DGH premises at sector 73, Noida. Integration of Software at NDR site has been completed. Build up phase on pilot data and priority data has also been completed. Currently, NDR is in operation phase wherein data loading & sharing is in progress. So far 16,65,145LKM 2D seismic, 5,83,985 SKM 3D seismic data, 15,254 well reports and 1,964 seismic reports have been uploaded.

NDR is ready for providing data to various E&P operators through launching of OALP/HELP programme. The interested E&P companies would be able to view geo-scientific data from anywhere in the world and firm up an opinion regarding prospectivity of the blocks prior to bidding. It has been decided to establish SDC at Bhubaneswar in BMC complex where ONGC premises exist.

(ii) Policy for Geo-scientific data generation for hydrocarbons in Indian sedimentary Basins

In order to acquire geophysical data in poorly explored and unexplored areas, the Government has formulated a new policy approved on 20.05.2014 for Geo-scientific data generation for hydrocarbons in Indian sedimentary Basins through Non-exclusive Multi-Client Geo-scientific surveys.

M/s Electromagnetic Geo-services ASA, Norway has signed the Agreement of the Data Policy along with Project Data Delivery Bank Guarantee for 10079.96 LKM Marine CSEM & MMT Data Acquisition, Processing, Inversion and Interpretation studies. Interpretation of 310.5 LKM of CSEM & MMT data has been completed in Phase-I of the survey.

M/s Geoex Limited, United Kingdom has submitted two proposals for Non-exclusive Multi-client 2D Seismic survey of 8867.16 LKM in Eastern Offshore Andaman Islands, India and 9852.55 LKM in Offshore Krishna Godavari Basin, India. Both the proposals are currently under examination at DGH and will be forwarded to MoP&NG shortly.

(iv) Re-assessment of Hydrocarbon Resources of India

A Multi Organization Team (MOT) has been constituted to carry out re-assessment of hydrocarbon resources of India in all its 26 sedimentary basins. The project is being carried out by ONGC in association with Oil India Limited & DGH. DGH is providing geological and geophysical data for areas other than those operated by ONGC.The project took off on 01.09.2015 and is scheduled to be completed in 27 months.

The project is under three tier monitoring, National Steering Committee (NSC) for Periodic review of progress of work (half yearly), Multi-Organisation Team (MOT) to ensure data confidentiality and quality of output (quarterly) and Technical Monitoring Group (TMG) to monitor progress of project (bi-monthly). Till date, eleven MOT meetings, 3 National Steering Committee Meetings and six reviews by Technical Monitoring Group have been held.

An international domain expert, Dr. Bjorn Wygrala and his team has been engaged on nomination basis as Project Advisor and Technical Advisor.

So far, HC resource assessments study for ten basins *(Karewa, Bastar, Satpura-South Rewa-Damodar, Chattisgarh, Kerala-Konkan, Vindhyan, Mahanadi, KG, Cambay& Mumbai Offshore)* have been completed and their draft reports are under preparation. At present the study for ten basins *(Spiti-Zanskar, Himalayan Foreland, Assam Shelf, Assam Arakan Fold Belts, Kutch-Saurashtra, Cauvery, Pranhita-Godavari, Bengal-Purnea, Rajasthan and Ganga-Punjab Plains)* is in progress.DGH is closely monitoring the progress of the projects".

1.73 When asked to furnish status of the different projects under National Seismic programme alongwith their physical and financial progress including funds allocated/utilised and physical targets and actual achievements, the Ministry in its reply furnished the following:

"Physical and Financial Status of the NSP as on 26.02.2017 is as under:

	PHYSICAL TARGETS AND ACHIEVEMENTS				LKM		
Agency	Data	FY2016-17			Total project		
		Target	Achieved	% Achieved	Target	Achieved	% Achieved
ONGC	ACQ	8725	3620.7	41.5	40835	3620.7	8.9
	P&I	0	0	0	40835	0	0
OIL	ACQ	1214.2	389.3	32.1	7408	389.3	5.3
	P&I	0	0	0	7408	0	0
BOTH	ACQ	9939.2	4010	40.3	48243	4010	8.3
	P&I	0	0	0	48243	0	0

	FINANCIAL GRANTS AND UTILISATION						
Agency	**Data**	**Funds granted, Cr**		**Services completed for funds, Cr**		**Reimbursement sought for payments made, Cr**	
		BE2016-17	**Total**	**BE2016-17**	**Total**	**BE2016-17**	**Total**
ONGC	**ACQ**	**517**	**2055**	**140**	**140**	**36**	**36**
	P&I	**0**	**104.58**	**0**	**0**	**0**	**0**
OIL	**ACQ**	**89**	**727**	**15**	**15**	**0**	**0**
	P&I	**0**	**46.12**	**0**	**0**	**0**	**0**
BOTH	**ACQ**	**606**	**2782**	**155**	**155**	**36**	**36**
	P&I	**0**	**150.7**	**0**	**0**	**0**	**0**

1.74 When the Committee sought details about the two proposals that have been submitted for Multi -client policy for geo scientific data generation which currently under examination, the Ministry in its written reply furnished the following:

"Details of proposals received on Speculative Multi-client Policy for Geo-Scientific Data Generation are as under:

Proposal	**Name of Service Provider**	**Survey Details**			**Validity of Provisional Letter of Consent**	**Present Status**
		Type of Survey	**Area**	**Proposed tentative Volume (LKM)**		
1	Electromagnetic Geoservices ASA, Norway	Marine EM (CSEM &MMT) Data Acquisition and Processing	West Coast-Kutch, Saurastra & Mumbai Basin	10079.96 LKM / 328,286 Sq. Km	Signed Agreement on 08.09.2015.	310.5 LKM of CSEM data has been acquired so far out of modified plan of 802.5 LKM The Contractor has submitted the complete data alongwith reports and deliverables on 20.02.2017
2	Geoex Limited, UK	(a) 2D Seismic survey	Eastern Offshore Andaman Islands	8867.16 LKM		Geoex Ltd, UK submitted proposal on 06.10.2016. after scrutiny the proposal was sent to MOP&NG for MOD and MOHA clearances on 01.02.2017. MOP&NG sent it to MOD & MOHA for clearance on 20.02.2017
		(b) 2D Seismic survey	Offshore KG Basin	9852.55 LKM		Geoex Ltd, UK submitted proposal on 06.10.2016. after scrutiny the proposal was sent to MOP&NG for MOD and MOHA clearances on 01.02.2017. MOP&NG sent it to MOD & MOHA for clearance on 20.02.2017.

R. INTERNAL AND EXTRA BUDGETARY RESOURCES (IEBR) OF OIL PSUs

1.75 When the Committee asked to furnish the allocation and utilisation of IEBR resources made under different heads by oil PSUs, the Ministry submitted the following:

> "Statement showing CPSE and sector-wise actuals 2015-16, BE 2016-17, RE 2016-17 and BE 2017-18 of CPSEs is annexed.

Internal and Extra Budgetary Resources (I& EBR)- Actuals for 2015-16, BE, RE for 2016-17 and BE 2017-18

(Rs. Crore)

Name of the CPSEs	2015-16	2016-17		2017-18
	Actuals	BE	RE	BE
Exploration & Production				
ONGC	30110.43	29307.20	28881.68	29967.82
GAIL	1418.49	1734.59	1507.91	1951.73
HPCL	20.84	67.02	7.48	36.25
BPCL	1354.00	800.00	2011.00	1500.00
IOCL	1224.57	1997.75	6860.79	2953.00
OIL	12262.89	11381.89	17012.73	9252.34
ONGC-Videsh	6470.24	14843.00	19450.00	7088.00
Sub-Total	**52861.46**	**60131.45**	**75731.59**	**52749.14**
Refining & Marketing Sector				
IOCL	12921.79	10083.19	12103.11	15890.35
HPCL	5896.90	1907.24	5642.52	7073.75
BPCL	6933.00	9797.00	6832.80	5600.64
CPCL	1342.74	1073.00	1229.00	845.00
NRL	1323.57	157.00	1435.49	1260.95
MRPL	11322.82	1828.27	576.17	1126.13
Sub-Total	**39740.82**	**24845.70**	**27819.09**	**31796.82**
Petro-Chemicals Sector				
IOCL	222.22	1691.93	712.96	1318.44
HPCL	0.00	0.00	0.00	0.00
GAIL	461.51	53.00	335.09	101.27
BPCL	0.00	0.00	0.00	
MRPL	3891.94	442.48	23.83	11.62
NRL	0.00	0.00	0.00	0.00
Sub-Total	**4575.67**	**2187.41**	**1071.88**	**1431.33**
Engineering Sector				
Balmer Lawrie	45.37	50.00	51.00	50.00
Total-Engineering Sector	**45.37**	**50.00**	**51.00**	**50.00**
TOTAL	**97223.32**	**87214.56**	**104673.56**	**86027.29**

Note: Due to typographical error, Rs.700 crore proposed under Petrochemicals by BPCL could not be printed in Budget Document 2017-18.

1.76 The outlay for investment in public sector undertakings during 2017-18 has been reduced from BE 2016-17 (Rs. 60131.45 crores) and RE 2016-17 (Rs. 75731.59 crores) to Rs. 52749.14 crores. When the Committee asked to explain the reasons for such reductions, the Ministry in its written reply gave the following:

> "Reasons for outlay for investment in Central Public Sector Enterprises (CPSEs) under Exploration & Production sector during 2017-18 are as follows:
>
> **ONGC Videsh:**
>
> BE & RE for 2016-17 at Rs.14843.00 crore and Rs.19450 crore respectively include acquisition CAPEX of Rs.7,800 crore in BE 2016-17 and Rs.12,808 crore in RE 2016-17 towards acquisition of stake in Vankorneft Russia.
>
> BE 2017-18 is Rs.7,088 crore, which is towards exploration and development activities of existing projects and excludes CAPEX for new acquisition. The CAPEX for new acquisition of assets is not considered at this stage due to uncertainty of finalization of such acquisition.
>
> **ONGC**:
>
> There is no shortfall in BE for 2017-18 compared to BE & RE for 2016-17.
>
> **OIL:**
>
> As far as Oil India Limited (OIL) is concerned, the projected IEBR (Internal and Extra Budgetary Resources) for RE 2016-17 was 17012.73 crore which included a one time loan of Rs.5360.00 crore raised for investment in acquisition of Russian assets. No additional loans have been projected in IEBR of Rs.9252.34 crore for BE 2017-18.
>
> **GAIL:**
>
> There is no shortfall in BE for 2017-18 compared to BE & RE for 2016-17.
>
> **IOCL:**
>
> There is no shortfall in BE for 2017-18 compared to BE for 2016-17. However, RE for 2016-17 was higher than the BE for 2016-17 and BE for 2017-18, as provision for acquiring assets abroad was kept in RE 2016-17.
>
> **BPCL:**
>
> During 2016-17, BE and RE for exploration & production sector is Rs.800.00 crore and Rs.2011.00 crore respectively, against BE Rs.1500 crore for 2017-18. However, RE of Rs.2011 crore for 2016-17, was higher because an allocation was kept in RE for acquisition of assets abroad.
>
> **HPCL**:
>
> HPCL has non-operating minority Participating Interest (PI) in consortium with other oil CPSEs and E&P companies in 20 Exploration Blocks, all of which were allotted under NELP rounds. As all but one of the blocks are under relinquishment, the expenditure is on a declining trend. BE 2016-17 was made

based on the work programs received from the Operators and the expected expenditure proportionate to HPCL's PI.

The RE 2016-17 was revised to Rs.7.48 crore from a BE of Rs.67.02 crore mainly because of lower expenditure in the following 2 Exploration blocks –

i) For Block MB-OSN-2010/2, Rs.30 crore was taken as the estimated expenditure while preparing the BE. However, based on the 3-D seismic interpretation, the Consortium decided not to go ahead with drilling of the well as the block was under high risk category and decided to relinquish this block. The actual expenditure in this block during 2016-17 is estimated at Rs.6.59 crores, which is mainly towards cost of unfinished committed work program paid to MoP&NG.

ii) Block CY-DWN-2004/3 – Consortium decided to relinquish this block without drilling a well due to poor prospectivity and submitted a proposal to DGH for waiver of cost of unfinished committed work program. Provision for expenses amounting to Rs.34.27 crores towards the cost of unfinished committed work program was made in BE 2016-17, which as the issue is yet to be decided by DGH, has now been shifted to BE 2017-18".

1.77 When asked about the actual expenditure incurred against the budgeted account under different heads of annual plan of Oil PSUs during the year 2017-18, the Ministry have provided the following information:

"Details of actual expenditure incurred by oil and gas CPSEs against budget account under different heads during 2016-17 (upto December, 2016) is as under:

(Rs. crore)

Sectors/ Activities	2016-17	
	BE	Actual Expenditure ((April-Dec.'16)
Exploration & Production	60131.45	59411.26
Refinery & Marketing	24845.70	18082.49
Petrochemicals	2187.41	516.40
Engineering	50.00	26.66
Total Oil & Gas Sector	**87214.56**	**78036.81**

S. INTERNATIONAL COOPERATION IN PETROLEUM SECTOR

1.78 When the Committee sought to know about major international agreements signed by the Government/Oil PSUs in petroleum sector in 2016-17, the Ministry submitted the following:

"Details of the MoUs signed by Oil and Gas PSUs in 2016-17 are:

MoUs signed by PSUs in 2016-17

SN	Company	MoU / Agreement with	Date	Name of the MoU/Agreement	Broad purpose of the MoU/Agreement	Financial commitment	Remarks
1	Petronet LNG Limited	Petrobangla, Bangladesh	29th Dec 2016	Non – binding MoU for Collaboration to set up Liquefied Natural Gas (LNG) Infrastructure Development Project.	To set up a land based LNG Terminal at Kutubdia, Bangladesh	NIL	The detailed feasibility of the project is still to be completed. The decision of financial commitment will be subject to viability of the project.
2	Petronet LNG Limited	ENGIE Global LNG BU	24th June 2016	Non - binding MOU	Both the entities have shown common interest for following market segments: LNG to power, LNG as fuel to tucks and inland waterways, LNG to industries, and LNG transportation by ISO containers and small scale LNG carriers.	NIL	Development of small scale LNG retaining market in the country.
3	Numaligarh Refinery Limited (NRL)	Rok Industries PO BOX: 103284 00101 Nairobi, Kenya	1st July 2016	Contract for procurement of approximately 900 MT Fully Refined Paraffin Wax (HS Code: 2717. 20.00)	Sale of paraffin wax	USD 8,65,800 (approx)	-
4	Numaligarh Refinery Limited (NRL)	Golden Wax Company Limited, No. G/63(A), Pad auk Street Bayint Naung, Pweyontan, Mayan gone Township, Yangon, Myanmar	14th Feb 2017	Contract for procurement of approximately 300 MT Fully Refined Paraffin Wax (HS Code: 2717. 20.00)	Sale of paraffin wax	USD 3,03,000 (approx)	-
5	Numaligarh Refinery Limited (NRL)	Shwe sein aung trading co.,ltd, no 153/A , First Floor Corner of Kantkaw Lane (1) and Yoe Gyi Pat Street, Bayintnaung Mayangone T/S, Yangon, Myanmar	14th Feb 2017	Contract for procurement of approximately 320 MT Fully Refined Paraffin Wax (HS Code: 2717. 20.00)	Sale of paraffin wax	USD 3,23,200 (approx)	-
6	Engineers India Limited (Signed agreement on behalf group of Indian Companies : GAIL,OVL, EIL and PLL)	GAZPROM, Russia	15 Oct 2016	Joint study for Russia-India Gas Pipeline	Joint study of Gas supply routes from Russia and other countries to India and other areas of cooperation	-	Further to the signing of MoU, study is underway for Russia-India Pipeline.
7	Engineers India Limited (EIL)	Bangladesh Petroleum Corporation (BPC)	19 Apl 2016	Contract agreement for providing PMC Services for Installation of Eastern Refinery Limited Unit-2 at Chittagong	EIL will be providing PMC services for installation of Unit-2 of 3.0 MMTPA capacity	-	EIL Contract Value: USD 17.58 Millions
8	Engineers India Limited (EIL)	Padma Oil Company Limited (A subsidiary of Bangladesh Petroleum Corporation (BPC))	6 Oct 2016	Contract agreement for carrying out Detailed Feasibility Study and Front-End Engineering Design (FEED) for 270 Km Chittagong-Dhaka Multiproduct Pipeline Project	EIL will be preparing Detailed Feasibility Report and Front-End Engineering Design (FEED) for 270 Km Chittagong-Dhaka Multiproduct Pipeline Project	-	EIL Contract Value: USD 825,780
9	Engineers India Limited (EIL)	Sonatrach, SPA	26 Jan 2017	Contract agreement for carrying out Studies and Providing PMC Services for Rehabilitation Project of	EIL will be carrying out Studies and Providing PMC Services for Rehabilitation Project of Ethylene Unit at	-	EIL Contract Value: USD 7.67 Millions

				Ethylene Unit at CP1K Petrochemical Complex-Skikda, Algeria	CP1K Petrochemical Complex-Skikda, Algeria		
10	Consortium of Bharat PetroResources Limited (BPRL), OIL & IOCL	Rosneft	5th October 2016	Vankor Sale & Purchase Agreement	Oil India Ltd, IOCL and BPRL acting jointly as the Indian Consortium, signed definitive agreements to acquire upto 23.9% shares of the charter capital of JSC Vankorneft, a company organised under the laws of the Russian Federation, which is the owner of Vankor and North Vankor Field licenses, from Rosneft.	For the Indian Consortium - approx. USD 2020 mn plus or minus adjustments towards net working capital, cash profits and interests (approx. USD 1787 mn	Transaction closed on October 5, 2016. Indian Consortium has taken Directorship positions on Vankorneft JSC 07.10.2016
	Consortium of Bharat PetroResources Limited (BPRL), OIL & IOCL	Rosneft	5th October 2016	Share Sale and Purchase Agreement for Acquisition of stakes in Taas-Yuryakh (Russia)	Indian Consortium partners IOCL, Oil India and BPRL acquired 29.9% stake in Taas-Yuryakh, Russia w.e.f 5th October 2016 from Rosneft	For the Indian Consortium - approx. USD 1242 million	Transaction closed on October 5, 2016.
12	OVL on Behalf of OIL, IOCL, BPRL, HPCL	Rosneft	15 Oct 2016	Cooperation Agreement in the area of Education and Training between Rosneft and OVL	To explore the possiblity of imparting education /training to persons selected by the parties in the institutions in Russia and India, including corporate training centres in the Oil & Gas Sector	No financial obligations in the agreement - specific obligations shall be established by way of signing definitive agreements	Agreement signed by OVL on behalf of OIL, IOCL, BPRL & HPCL
13	IOCL	Bangladesh Petroleum Corporation (BPC)	18 April 2016	Non-binding MoU	For engaging in mutually advantageous activities in the field of LPG or any other petroleum product including development of infrastructure facilities and marketing Network and transportation of LPG from Chittagong to Tripura.	Nil	MoU proposes transportation of additional LPG from Chittagong to Tripura by road to start with and further by laying of a pipeline from Chittagong Port to Indian Territory depending on feasibility.
14	IOCL	M/s Premier LP Gas Limited (PLPG) Bangladesh, and M/s TOTAL Oil India Pvt Ltd	16 May 2016	MoU	For Storage of Imported Bulk LPG in the existing storage facility of M/s premier LP gas Chittagong, Joint marketing of Other petroleum products in Bangladesh and Extending supply facility of Bulk LPG by Road from Bangladesh to North eastern region in India		The movement of LPG can start from there by road, as soon as the permissions and modalities are in place for road movement of LPG within Bangladesh territory and corresponding entry into Indian Territory.
	GAIL	The Agreement was signed among Galkynysh Pipeline Company, State Concern "Turkmengas", Afghan Gas Enterprise, Inter State Gas	7th Apl 2016	Investment Agreement	In accordance with the provisions of SHA, an Investment Agreement (IA) was signed to govern infusion of equity into TPCL to undertake pre-FID activities at an estimated expenditure of USD 218 million	GAIL has to bear a share of 5%, i.e., USD 10.9 million.	India is pursuing the Turkmenistan-Afghanistan-Pakistan-India (TAPI) Pipeline project to receive natural gas supply from the Galkynysh fields in Turkmenistan. In November 2014, the Pipeline Consortium, TPCL

		Systems (Pvt) Ltd, GAIL (India) Limited and **TAPI Pipeline Company Limited (TPCL)**					**has been incorporated in Isle of Man, a British Crown dependency. On 13.12.2015, the Shareholders Agreement (SHA) of TPCL was signed for commencing laying of the TAPI pipeline section within Turkmenistan.**
16	**ONGC Videsh Ltd.**	**SOCAR TRADING (STSA)**	**MoU was executed on 27th May 2016; and JMA was executed on 21st September 2016**	**MoU and Sale and Purchase Agreement with SOCAR TRADING (STSA)**	**ONGC Videsh and SOCAR Trading SA entered into anMoU for co-operation in identified areas such as co-operation in joint marketing of Azeri crude, other mutually agreed crude oil/ gas etc. which was executed on 27th May 2016.** **The likely benefits are as under:** **a. Enter into a Sale and Purchase Agreement(SPA) for joint marketing the Azeri crude to be co-loaded with the STSA's volume to make larger cargoes resulting in freight optimization with expected better netbacks; The SPA is valid for a period of six months with effect from December 01, 2016 extendable with mutual agreement.** **b. Monthly cash flow from the sale of ONGC Videsh's equity oil instead of sporadic sale of Aframax cargoes based on fixed volume accumulation;** **c. Learning from STSA's best marketing practices and trading know how;** **d. Possibilities to jointly market other crudes of ONGC Videsh's;** **e. Possibilities to explore the opportunities of co-operation in the hydrocarbon value chain such as investment in E&P sector.**	**There is no financial commitments.**	**NA**
17	**ONGC Videsh Ltd.**	**DANA Energy, Iran**	**18thAugust 2016**	**MoU with DANA Energy, Iran**	**The MoU was executed on 18th August 2016 for development of possible projects of hydrocarbon and related studies in Iran. The MoU is valid up to 17th August 2018.** **The likely benefits are as under:** **a. Purpose and Scope:**	**There is no financial commitments.**	

					The MOU provides the framework to jointly analyze and develop possible Projects in Iran. The MOU constitutes an expression of non-binding intent and sets forth the principles and mechanisms by which the Parties intend to discuss and evaluate potential Projects. b. This MOU is built on line that no blanket exclusivity is provided to Dana Energy for Iran and it shall be project specific. Further, no third Party partnership for Agreed Projects without written consent of either Party; and c. The MoU envisages constitution of JWG (Joint Working Group) with an objective to carry forward the objectives of the MoU.		
18	ONGC Videsh Ltd.	MDC Oil and Gas Holding Company LLC (Mubadala Petroleum), UAE	6th February 2017	MoU with MDC Oil and Gas Holding Company LLC (Mubadala Petroleum), UAE:	ONGC Videsh entered into an Amendment Agreement on 6th February 2017 with Mubadala Petroleum, UAE renewing its earlier Agreement dated 29th September 2014, for collaboration in the potential areas of Upstream oil and gas exploration, development and production projects and LNG opportunities. The MoU is valid upto 28th September 2018.	There is no financial commitments.	
19	ONGC Videsh Ltd.	Rosneft Oil Compnny, Russia	15th October 2016	Co-operation Agreement between Rosneft Oil Company and ONGC Videsh on behalf of Indian Oil PSUs (ONGC Videsh, Oil India, IOCL, BPRL and HPCL)	ONGC Videsh on behalf of Indian Oil PSUs (ONGC Videsh, Oil India, IOCL, BPRL and HPCL) executed Co-operation Agreement to consider the possibility of imparting higher education to persons specially selected by the Parties in the educational organizations/ institutes of the Russian Federation and the Republic of India based on higher education programs (bachelor, master programs) in the areas which are relevant for the Parties.	There is no financial commitments.	
20	Indian consortium	Rosneft, Russia	3 Feb	Confidentiality Agreement	For data room access to Rosneft's Vankor Cluster	Financial commitme	-

	(OIL, IOC, BPCL, PPCL, OVL)		**2017**		**fields**	**nt can be ascertaine d only after completion of due diligence**	
21	**Indian consortium (OIL, IOC, BPCL, PPCL, OVL)**	**ADNOC, UAE**	**5 Apl 2016**	**Confidentiality Agreement**	**For data room access to ADNOC's assets**		
22	**IOCL**	**Roads and Highways Department of the Bangladesh**	**18th Aug 2016**	**MoU on route permit for carrying petroleum products via Bangladesh**	**To facilitate movement of Petroleum Goods (motor Spirit, High Speed diesel, Superior Kerosene Oil & Liquefied Petroleum Gas) from the state of Assam in India to the State of Tripura in India via territory of Bangladesh.**	**-**	**Expired on Sep'2016 being pursued for further renewal.**

T. MAKE IN INDIA

INDEG groups have been set up by all PSUs working in the Upstream, Midstream and Downstream sectors. These INDEG group hold vendor development programmes to promote indigenization.

1.79 When the Committee sought to know the initiatives that have been launched by Oil PSUs/Government under the ambitious 'Make in India' campaign to provide fillip to oil sector during the last two years, the Ministry have submitted as under:

> "The "Make in India" initiative was launched by the Prime Minister on 25th September, 2014 as a major new national programme designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best-in-class manufacturing infrastructure in India
>
> Upstream, Midstream and Downstream companies of Oil and Gas sector have formed Indigenous Development Group (INDEG) to promote indigenization and are working towards import substitution. Oil and Gas PSUs have also signed MoUs with Global Players with the aim of enhancing production and progressive import substitution.\
>
> Oil and Gas PSUs are following the guidelines on relaxation for turnover and prior experience with respect to Start-ups & MSMEs which meet quality and technical specifications".

U. SKILL DEVELOPMENT

Hydrocarbon Sector Skill Council has been set up which would offer certification based skill development programmes. For this purpose, Skill Development Institutes (SDIs) for Hydrocarbon Sector are being set up by PSUs. SDI at Nagaram, Andhra Pradesh is already operational since February 2015 while SDI at Bhubaneswar and Vishakhapatnam have been inaugurated on 9.5.2016 and 20.10.2016 respectively. A MoU has been signed between Ministry of Petroleum and Natural Gas and Ministry of Skill Development and Entrepreneurship for collaboration and giving impetus to skill development programmes in the hydrocarbon sector.

1.80 When asked as to what measures have been taken by the Government for skill development under 'Skill India' initiative in the petroleum sector during 2016-17 including the allocation of funds under the initiative and persons have been covered in the programme, the Ministry submitted the following in its written reply:

> "The Skill India initiative was launched by Prime Minister of India on 15th July, 2015. The Mission has been developed to create convergence across sectors and states in terms of skill training activities. Considering the highly fragmented nature of the work segment in Oil and Gas sector, inadequate penetration of quality training initiatives and need for employers to continuously fine-tune their strategy with regard to hiring, training and retention of their human resources, the Hydrocarbon Sector Skill Council (HSSC) has been set up under Societies Registration Act, 1860 on 26-04-2016 which has a projected training plan for certification based skill development programmes.
>
> An MoU for collaboration in the area of skill development was signed between Ministry of Petroleum & Natural Gas and Ministry of Skill Development & Entrepreneurship on 28th November, 2016. This MOU establishes a broad framework of collaboration between both the Parties, for providing the appropriate skill development framework for supply of skilled manpower through vocational and technical training, skill up-gradation, building of new skills, mapping of existing skills and their certification based on the principle that there is sufficient scope for cooperation and leveraging comparative advantage.
>
> Under the Skill Development Initiative of the Government of India, Oil & Gas PSUs under MoPNG have set up and are in the process of setting up 7 Skill Development Institutes (SDIs) in the country. These SDI's are set up as societies with one PSU as the lead PSU:

- IOCL as lead has set up a SDI at Bhubaneswar, Odisha and was inaugurated by Hon'ble MOS (Independent Charge), Sh. Dharmendra Pradhan on 09th May, 2016**.** In the first instance, it is imparting training in electrical and welding trades. 84 persons have graduated in the first batch and have been offered placement. The second batch of 90 students is underway.

- HPCL as lead has set up a SDI at Vishakhapatnam, which was inaugurated by MoS (I/C), P&NG on 20th October, 2016. At present, it is running skill development courses in 10 trades with 900-1000 candidates estimated to be trained per year.

- GAIL is operating a temporary campus at Nagaram, Andhra Pradesh since February 2015. SDI GAIL runs courses of 3 months each on Auto CADD and Web designing. 257 students in Auto CADD and 24 students in web designing were trained 2016-17. The certification was done by NSDC and ILFS.

- GAIL as lead is exploring the option of starting another SDI at Rae Bareli in Uttar Pradesh.

- BPCL as lead has started a Skill Development Institute at Kochi, Kerala. Regular classes have commenced from 2.1.2017. 90 students have been enrolled in the trades of Industrial electrician and Industrial welding courses.

- ONGC and OIL as leads are in the process of setting up of SDIs at Ahmedabad and Guwahati.

There is no allocation of funds from the government for the skill development initiatives. The HSSC has a corpus which is funded by the Oil and Gas companies both Public and Private sector. The HSSC is responsible for laying down the qualification standards and certification for different trades for the sector".

V. TRANSNATIONAL PIPELINE PROJECTS

1.81 When enquired about the latest status on transnational gas pipeline projects like Turkmenistan -Afghanistan-Pakistan- India(TAPI) and Iran- Pakistan - India (IPI), the Ministry have submitted details as under:

Turkmenistan -Afghanistan-Pakistan- India (TAPI)

"On 13th December 2015, the Ground Breaking ceremony to start the work on the Turkmen leg of the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline was held at Mary, Turkmenistan. Earlier in November 2014, the Pipeline Consortium, TAPI Pipeline Company Limited (TPCL) was incorporated in Isle of Man, a British Crown dependency. The Share Holders Agreement of TPCL was also signed on

13th December 2015. The shareholding percentage in the TPCL would be Turkmenistan 85%, India 5%, Pakistan 5% and Afghanistan 5%.

With the Ground Breaking ceremony on 13th December 2015 work has begun on the Turkmen leg of the pipeline. The technical study of the TAPI project has estimated an overall project duration of 6¾ years from the start of the Front End Engineering Design (FEED) process till handing over of the pipeline for commercial operation. The Pipeline will enter India at Fazilka, Punjab. On 7 April 2016 the Investment Agreement (IA) of TAPI Pipeline Company Ltd (TPCL) was signed in Ashgabat. It relates to initial equity infusion by the shareholders. TPCL subsequently opened its office in Dubai, UAE and has been holding its Board Meetings.

Iran- Pakistan - India (IPI)

IPI Pipeline was envisaged to transport natural gas from South Pars gas fields of Iran to Pakistan and India with a carrying capacity of 60 MMSCMD of natural gas, to be equally supplied to India and Pakistan. The total length of the pipeline up to Indian border (near Barmer) was about 2135 KMs (1100 KMs within Iran and the rest within the territory of Pakistan). As per past estimates, investments required for this pipeline were in excess of US $ 7 Billion. India has been involved in discussions on the India-Pakistan-Iran (IPI) pipeline project as a part of the Joint Working Group on Oil, Gas and Petrochemicals with Iran. However, in the light of the sanctions on Iran, the IPI Project did not moved forward and there have been no developments in this project since 2008".

Appendix-I

Ministry of Petroleum & Natural Gas
(Petroleum Aur Prakritik Gas Mantralaya)

1. Exploration for, and exploitation of petroleum resources, including natural gas and Coal Bed Methane, gas hydrates and shale gas.

2. Production, supply, distribution, marketing and pricing of petroleum, including natural gas, Coal Bed Methane and petroleum products.

3. Oil refineries, including Lube Plants.

4. Additives for petroleum and petroleum products.

5. Lube Blending and greases.

6. Blending and Blending prescription for biofuels including laying down the standards for such blending.

7. Marketing, distribution and retailing of biofuels and its blended products.

8. Conservation of Petroleum products.

9. Planning, development, control and assistance to all industries dealt with by the Ministry.

10. Strengthening energy security by acquiring oil and gas equity abroad and participation in transnational oil and gas pipeline projects.

11. Creation and administration of strategic petroleum reserve through Indian Strategic Petroleum Reserves Limited (ISPRL).

12. Petroleum Planning and Analysis Cell (PPAC).

13. All attached or subordinate offices or other organizations concerned with any of the subjects specified in the list, including Directorate General of Hydrocarbons (DGH), Centre for High Technology (CHT), Oil Industry Development Board (OIDB), Petroleum Conservation Research Association (PCRA), etc.

14. Planning, development and regulation of oilfield services.

15. Administration of Engineers India Limited, including their subsidiaries and joint ventures.

16. Public sector projects falling under the subject included in this list except such projects which are specifically allotted to any other Ministry/ Department.

17. The Oil Fields (Regulation and Development) Act, 1948 (53 of 1948).

18. The Oil and Natural Gas Commission (Transfer of undertaking and Repeal) Act, 1993 (65 of 1993).

19. The Petroleum & Minerals Pipelines (Acquisition of right of User in Land) Act, 1962 (50 of 1962).

20. The ESSSO (Acquisition of Undertakings in India) Act, 1974 (4 of 1974).

21. The Oil Industry (Development) Act, 1974 (47 of 1974).

22. The Burrnah-Shell (Acquisition of Undertaking in India) Act., 1976 (2 of 1976).

23. The Caltex (Acquisition of Shares of Caltex Oil Refining (India) Limited and of the Undertakings in India of Caltex (India) Limited Act, 1977.

24. Administration of the Petroleum Act, 1934 (30 of 1934) and the rules made thereunder.

25. Administration of Balmer Lawrie Investment Limited and Balmer Lawrie and Company Limited.

26. Petroleum & Natural Gas Regulatory Act, 2006.

27. Matter pertaining to M/s Biecco Lawrie Limited.

28. Matter pertaining to Gas Authority of India Limited (GAIL).

29. Matter pertaining to natural gas pipelines.

30. Matter pertaining to LNG terminals.

31. The Rajiv Gandhi Institute of Petroleum Technology Act, 2007.

32. Matter pertaining to Indian Institute of Petroleum & Energy (IIPE).

33. Liquefied Petroleum Gas (Regulation of Supply and Distribution) Order, 2000.

34. Matter pertaining to Direct Benefit Transfer of LPG (DBTL) PAHAL.

35. Matter pertaining to Direct Benefit Transfer in Kerosene (DBTK).

36. Matter pertaining to Pradhan Mantri Ujjwala Yojana (PMUY).

Appendix-II

List of Public Sector Undertakings and other organisations under the administrative control of the Ministry of Petroleum & Natural Gas

I. Oil Companies in which Government of India has shareholding as on 31.03.2016

1. Oil & Natural Gas Corporation Limited	68.93%
2. Indian Oil Corporation Limited	58.57%
3. Hindustan Petroleum Corporation Limited	51.11%
4. Bharat Petroleum Corporation Limited	54.93%
5. GAIL (India) Limited	56.11%
6. Engineers India Limited	59.37%
7. Oil India Limited	67.64%
8. Biecco Lawrie & Co Limited	99.56%*
9. Balmer Lawrie Investment Limited	59.57%

*This includes 67.33% of share of Oil Industry Development Board.

II. Subsidiaries and other Companies

1. ONGC Videsh Limited	- Wholly owned by ONGC
2. Mangalore Refinery & Petrochemicals Limited	- Subsidiary of ONGC
3. Bharat Petro Resources Limited	- Subsidiary of BPCL
4. Chennai Petroleum Corporation Limited	- Subsidiary of IOCL
5. Numaligarh Refineries Limited	- Subsidiary of BPCL
6. Certification Engineers International Limited	- wholly owned by EIL
7. EIL Asia Pacific Sdn BHD	- wholly owned by EIL
8. GAIL Gas Limited	- wholly owned by GAIL

III. Other Organisations

1. Oil Industry Development Board
2. Petroleum Conversation Research Association
3. Oil Industry Safety Directorate
4. Centre for High Technology
5. Petroleum Planning & Analysis Cell
6. Directorate General of Hydrocarbons
7. Rajiv Gandhi Institute of Petroleum & Technology
8. Petroleum and Natural Gas Regulatory Board
9. Indian Strategic Petroleum Reserves Limited
10. Indian Institute of Petroleum Energy
11. Society for Petroleum Laboratory

PART - II

OBSERVATIONS / RECOMMENDATIONS

In pursuance of Rule 331E (1) (a) of Rules of Procedure and Conduct of Business in Lok Sabha, the Demands for Grants (2017-18) in respect of different Ministries/Departments stand referred to concerned Departmentally related Standing Committees. Thus Standing Committee on Petroleum and Natural Gas (2016-17) have examined the Demands for Grants (2017-18) of the Ministry of Petroleum and Natural Gas under its jurisdiction. This Report of the Committee deals with examination of Demands for Grants (2017-18) of the Ministry of Petroleum and Natural Gas. The recommendations/observations of the Committee are in succeeding paragraphs.

Recommendation No. 1

Allocation of Financial Resources to MoPNG

The Committee note that the Budget Allocation of the MoPNG for the year 2017-18 has been pegged at Rs. 29157.57 crore. The funds allocated during 2016-17 at BE stage was Rs 30160.62 crore which has been revised to Rs 30241.76 crore at RE stage. However, the actual expenditure has been Rs. 22,600.91crore till 31.12.2016. The major expenditure are accounted for schemes like Direct Benefit Transfer for LPG (DBTL), other subsidiary payable on SKO, Pradhan Mantri Ujjwala Yojana (PMUY), Indian Strategic Petroleum Reserves Limited (ISPRL) and PDHPL pipeline.

Budgetary allocation for DBTL for LPG which has been pegged at Rs. 13000 crore for RE 2016-17 out of which Rs. 10224.25 crore has been spent till December 31, 2016. The other major component of budget allocation has been the 'Other subsidy payable on SKO including NE Region' for which an amount of Rs. 8770.70 crore has been allocated at RE 2016-17 while actual utilisation has been 7094.21 crore till December, 2016. The allocation for the scheme during BE 2017-18 is Rs. 8661.87 crore.

PMUY Scheme was allocated Rs. 2000 crore at BE stage in 2016-17 which was revised to Rs 2500 crore at RE stage. The actual expenditure is only Rs. 1436.03 crore till December, 2016. The allocation for PMUY Scheme in BE 2017-18 is Rs. 2500 crore. The Committee also note that for ISPRL phase-I, the actual expenditure in 2015-16 was Rs. 1153 crore. Against RE of Rs. 2001 crore in 2016-17, the expenditure upto December, 2016 was Rs. 1000 crore. In BE 2017-18, Rs. 2499 crore has been allotted for ISPRL phase-I. For phase-II, a token allocation of Rs. 1 crore has been made. For Pradhan Mantri Urja Ganga (PMUG) pipeline project, which aims to connect eastern part of the Country with the western part for gas supply, the allocation in BE 2017-18 is Rs. 1200 crore. In the year 2016-17, allocation for PMUG project at RE stage was Rs. 450 crore.

The Committee feel that the PMUY, ISPRL and PMUG are very important schemes and recommend that the funds allocated therefore should be fully utilized by the end of the financial year. The Committee also recommend that funds should be adequately allocated for schemes like PMUY and the ISPRL- and in case of any shortages, the Ministry of Finance should be promptly approached for additional funds at the RE stage. Similarly, the funds should not be a constraint also for nationally important pipeline projects such as Pradhan Mantri Urja Ganga project for which partial GBS has been committed by the Government.

Recommendation No. 2

Indian Strategic Petroleum Reserves Limited (ISPRL)

The Committee note that the first phase of building of strategic oil caverns is almost complete and while the caverns located at Visakhapatnam and Mangalore have been commissioned, the Padur cavern is delayed on account of land acquisition issues and pending court cases. The Committee further note that for ISPRL Phase-I, the BE for 2016-17 was of Rs. 1001 crore, which has been enhanced to Rs. 2001 crore at RE stage. Out of this amount, Rs. 1000 crore has been utilised till December, 2016 which is only 50% of the amount allocated under RE. The Committee find that for Visakhapatnam Crude Oil storage facility, the total reimbursable amount is Rs. 2112 crore. Out of this, remaining amount of Rs. 1001 crore has to be utilised for reimbursing PSUs. But, surprisingly, not a single rupee has been shown as spent till December, 2016 for meeting operation and maintenance cost (O&M costs) out of Rs. 45 crore allocated for the purpose at RE 2016-17 stage. The Committee, therefore, desire that the remaining amount should be reimbursed to the Oil PSUs and Ministry should submit a justification for no allocation for meeting O&M costs during BE 2016-17 and not spending a single rupee till December, 2016. The Committee note that the BE for crude filling in 2017-18 has been kept at Rs. 2499 crore and O&M expenses has been kept at Rs. 79 crore. The Committee hope that this allocation will be sufficient for filling of oil in phase-I caverns and to meet operation and maintenance costs.

While observing the funding pattern, the Committee find while that no Gross Budgetary Support (GBS) has been provided for the construction of caverns, the filling up of caverns in Visakhapatnam and one cavern in Mangalore has been funded through budgetary support. The Committee also note that the Government is looking at various options, including allowing overseas companies for storing their crude oil in these caverns. For filling up of one cavern in Mangalore, an agreement with Abu Dhabi National Oil Company (ADNOC) has also been signed. In order to fill up Padur storage facility, the Committee note that to formulate a viable commercial model, an EOI was floated and six

responses have been received at the end of last date for submission of proposal in end December 2016. The Committee therefore, recommend that the remaining part of the pipeline at Padur cavern should be expeditiously completed and desire that the ISPRL/Ministry should evaluate the proposals received for filling of Padur facility and finalise the same within a reasonable time.

The Committee also observe that the Government, in the budget, have announced construction of two more strategic caverns in Chandikhole (Odisha) and Bikaner (Rajasthan) under Phase-II of ISPRL. For the ISPRL Phase-II, Rs. 1 crore has been allocated in BE of 2017-18 against a total financial outlay of Rs. 9116 crore. While the cavern at Chandikhole will be completed in 64 months, the Bikaner cavern is expected to be completed in 96 months. The Committee desire to be informed about the international standards as far as time taken in construction of such caverns are concerned. The Committee feel that though the completion time for phase-II project has been kept very long, it, however, want that sufficient funds should be provided for completion of these strategically important projects.

Recommendation No. 3

Pradhan Mantri Ujjwala Yojana (PMUY)

The Committee note that Pradhan Mantri Ujjwala Yojana (PMUY) was launched in the year 2016-17 in order to increase LPG coverage among rural poor households. The scheme aims at providing 5 crore deposit free new LPG connections to women of Below Poverty Line (BPL) households over three years starting from 2016-17. The first two years will target 1.5 crore connections every year while 2 crore connections are to be given in the third year. The scheme will provide an initial cost of Rs 1600/- for providing LPG connection to poor households in the name of women of the household. Under the scheme, initially OMCs bear the cost of release of new connections out of their own available fund and subsequently, make their claim for reimbursement with the Ministry. Ministry reimburses the claimed amount after due verification.

The Committee also note that the target of 1.5 crore connections for the year 2016-17 has been achieved by the end of December 2016. During Financial Year 2016-17, Rs. 2000 crore was allotted for release of 1.5 crore connections under PMUY of which Rs. 1768 crore (claim made upto 30.11.2016) has been reimbursed to OMCs. At RE stage the allocation has been enhanced to Rs. 2500 crore. Further, Rs. 2500 crore has been allocated for Financial Year 2017-18.

While appreciating the Ministry and OMCs on the successful implementation of the Pradhan Mantri Ujjwala Yojana (PMUY), the Committee expect the Ministry to issue suitable guidelines to OMCs that the local elected public representatives particularly the Members of Parliament should be involved in the launch/ implementation of the scheme as this is a Central Government scheme. The Committee also recommend that the Ministry and OMCs should not become complacent and slacken but continue their efforts to achieve the targets in the next two years also and desire setting up a monitoring mechanism to ensure that the beneficiaries under the PMUY scheme are actually using the gas cylinders and refilling them. Any additional requirement of funds for covering

more than the targeted households may be sought from the Ministry of Finance at the RE stage. The Committee also desire that the Ministry/OMCs should evolve a mechanism involving elected public representative to identify deserving persons who may have been left out in the Socio-Economic Caste Census (SECC) data so that they may also become beneficiaries of PMUY.

Recommendation No. 4

Indian Institute of Petroleum and Energy

The Committee note that an Indian Institute of Petroleum and Energy (IIPE) is to be established in Visakhapatnam, Andhra Pradesh in accordance with the Andhra Pradesh Reorganisation Act, 2014. The objective of the University is to meet the quantitative and qualitative gap in the supply of skilled manpower in the petroleum sector and promote research activities. Total capital expenditure for the project is estimated at Rs. 655.46 crore. A provision of Rs. 14.20 crore has been made for IIPE in BE 2017-18. Andhra Pradesh Government has made available 200 acres of land free of cost for the IIPE and foundation stone for the project has been laid on 20th October 2016. The Committee further note that the IIPE is currently operating from a temporary campus at the space provided by the College of Engineering in Andhra University at Visakhapatnam from the year 2016-17. IIT-Kharagpur is acting as a Mentor Institution for starting the academic session 2016-17. The Committee are not satisfied with the progress made so far in setting up the Institute. The Committee note that since the institute is of national importance, it involves Legislation seeking Parliament approval so that the institute can give degrees. The Committee recommend that work relating to enactment of Legislation should be expedited and desire that the Institute should start functioning from its own campus at the earliest and adequate funds should be allocated for the purpose of building of own campus of IIPE. The Committee desire that the revised cost outlay and time line for completion of the project should be shared with the Committee.

Recommendation No. 5

Rajiv Gandhi Institute of Petroleum Technology (RGIPT) and Centres of Excellence

The Committee note that the construction of permanent campus of RGIPT at Jais, district Amethi, Uttar Pradesh is almost complete and has already been inaugurated in October, 2016. The Institute has started functioning from the new premises. The Committee also, however, note that progress of the RGIPT campus in Sibsagar, Assam is highly unsatisfactory. Ever since the foundation stone was laid in February, 2011, the project has got delayed due to a number of reasons including change of contractors, land preparation for construction, etc. The Assam centre of RGIPT is expected to operate from its temporary campus from the academic session 2017-18. A four member committee has now been constituted by MoPNG to submit the report on funding pattern for the institution, whether to be given from Oil PSU's/OIDB or GBS and also to examine if the grant of autonomous status is required for the Institute.

The Committee also note that in 2017-18, the Government has announced the establishment of two Centres of excellence in Petroleum Sector in Karnataka and Assam. The mandate of Karnataka Centre is to create an Energy Institute on the lines of World's leading energy institutes for undertaking contemporary research duly involving other Ministries and key stakeholders. The estimated expenditure under capital head for Bengaluru centre is Rs 358 cr. The mandate of RGIPT Centre at Assam is to set up a Centre to cater to requirements of blue-collar technicians especially in upstream area to meet the current gap in skill set and the anticipated demand in view of future exploration plans. The Assam Centre will be established at an estimated expenditure of Rs. 235 crore. RGIPT has been asked to prepare a fresh DPR in light of the mandate for Assam centre.

The Committee recommend that the remaining work in Jais, Uttar Pradesh be completed as soon as possible and the all the issues connected to RGIPT in Assam be resolved in a time bound manner including the funding pattern and

grant of autonomous status to the Institute. The Committee further recommend that the DPRs for Centres of Excellence in Assam and Karnataka should be prepared and submitted within three months so that the centres may be established at the earliest.

Recommendation No. 6

Direct Transfer of Cash Subsidy for Kerosene (DTCK)

The Committee note that Rs. 50 crore was allocated for DBTL in Kerosene in BE 2016-17. However at RE stage it was reduced to Rs. 0.01 crore as the DBTL scheme in 2016-17 was implemented in only four districts of Jharkhand and no amount could be spent in that year. The Committee further note that during 2016-17, a provision of Rs. 7094.21 crore was made in BE for making payments towards under recovery under the Head 'Other Subsidy payable including NE region (SKO)' which were fully utilized and at RE stage in 2016-17, the allocation were increase to Rs. 8770.70 crore as the subsidy outgo was more. In BE 2017-18, an allocation of Rs. 8661.87 crore has been made. The Committee also note that cash incentive to the tune of 75% of the subsidy saved is paid to the states/UTs which voluntarily undertake cut in PDS SKO allocation. In the year 2016-17, Karnataka, Haryana and Telangana undertook voluntary cut for which about Rs. 112.4 crore was paid to them. Allocation in 2017-18 has been increased to Rs. 150 crore as more states are expected to join the scheme. The Committee feel that expanding the coverage of LPG beneficiaries is necessary to reduce dependence on Kerosene. Only then it will be possible to reduce expenditure on the subsidy on Kerosene. The Committee feel that the Government should work towards eventual withdrawal of kerosene subsidy as it will not only result in more usage of cleaner fuel, promote the health of users but also address problems such as adulteration. The Committee, therefore, recommend that the efforts towards universal coverage of LPG should be intensified. More and more states should be encouraged to move towards DTCK in Kerosene to eliminate inefficiencies in Kerosene subsidies. The Committee also desire that the Ministry/OMCs should ensure that non-subsidized kerosene is available in retail outlet of OMCs so that consumers can easily purchase them.

Recommendation No. 7

Levy of Cess on Crude Oil

The Committee note that prior to 2016, the OID cess levied on domestically produced crude oil under Oil Industry (Development) Act, 1974 was being charged at the rate of Rs. 4500/MT. However, as the then prevailing low international crude prices (around US$30/barrel) had made the fixed cess rate of Rs. 4500/MT unsustainable for the oil producing companies, the OID cess was changed to 20% ad-valorem w.e.f. 1.3.2016. The Committee also note that the international crude oil prices have now started increasing and it has adversely affected the financial health of the domestic oil producing companies. At the prevailing international crude price of US$ 55/barrel and at the exchange rate of 1US$ = Rs. 66, the burden on account of cess comes to Rs. 5322 per ton which is Rs. 822/ton more than the earlier rate of Rs. 4500/ton. Therefore, the existing burden of cess is seriously hurting the margins of the domestic oil producing companies. The increasing trend of international crude oil prices may result in even more burden on upstream oil companies. It is in this context that the Ministry of Finance was approached by the Upstream Oil Companies including ONGC through the Ministry of Petroleum and Natural Gas to review and reduce the rate of OID Cess to 8% to 10% ad-valorem. The Committee understand that if the OID Cess is reduced to 10% ad-valorem, the burden per metric ton will be about Rs. 2661 per ton which is sustainable for the oil producing companies. The Ministry of Finance are of the view that the rate of OID cess may not be changed at this stage as there is still room to bear the cess by upstream oil companies and any reduction in cess may also impact revenue collection of the Government. The Committee feel that in view of stable or even declining domestic production of crude oil as also to fulfill the vision of the Hon'ble Prime Minister for reducing imports by 10% in the next five years, all possible incentives need to be given to the domestic oil producing companies. Therefore, keeping in view the severity of the situation for the finances of the upstream oil companies and also in the interest of domestic crude oil production, the Committee recommend that the MoPNG may continue to pursue the matter with the Ministry of Finance regarding

ad-valorem rate of cess on crude oil through appropriate channels regularly considering fluctuation of the international crude oil prices and exchange value of rupee. The Committee desire that Ministry should share with it the details regarding the total amount collected as OIDB cess and the amount utilised for the development of petroleum sector in the last three years. The Committee would further desire that the Government should ensure that the total OIDB cess collected should be utilized specifically for the purpose for which it is actually collected.

Recommendation No. 8

Reduction in Import Dependency

The Committee note that the Prime Minister has given a call to reduce import dependency on petroleum imports by 10% by the year 2022 and to implement the vision, a Committee had been constituted under the Chairmanship of Additional Secretary (P&NG) which submitted its final report in April 2016 and has recommended a five pronged strategy and actionable points for various divisions have been prepared and circulated. The Committee also note that action in this regard pertain to several Ministries/Departments such as Finance, Agriculture, Power, Highways and transport, etc. The estimated total savings will be 68.7 (O+OEG) Million Tonnes of Oil Equivalent (MTOE) as against the required reduction of 61.8 MTOE in consumption of Petroleum Products.

An integrated monitoring and advisory council is being constituted under the Chairmanship of Secretary (P&NG) with representatives of all ministries/departments having actions on their part. Given the fact that demand for petroleum products in the Country is increasing by about 10% per annum and the domestic production of crude oil and gas is almost stagnant or declining, the task of reduction in import dependency will be challenging . The Committee are of the view that the pace of addressing the goal by the Ministry has been very slow and does not augur well for the task to be achieved. It is two years since the goal has been spelt out but, no firm action by any of the ministries towards the goal has been started yet. Moreover, the Ministry has not fixed any annual target for reduction of imports of crude oil during the period leading upto 2022. On the contrary, the Committee note that in the last two years the imports of crude oil has increased and therefore, desire that the Ministry should fixed annual targets for reduction of imports of crude oil.

The Committee feel that the five pronged strategy devised by the Ministry is grossly inadequate and lacks inclusion of all round focus for the strategy does not indicate R&D activities to be undertaken, financial incentives needed etc. The Committee also feel that this task needs better coordination among the various

ministries and therefore, recommend that the entire exercise should be monitored at Inter-Ministerial level and wherever necessary, global cooperation may also be obtained. The Committee also opine that experiences in other parts of the world on some of these issues could also be studied and suitably incorporated in the strategy particularly in areas like use of Hydrogen as fuel, Electric Vehicles, solar equipments/appliances, hybrid vehicles etc,.

Recommendation No. 9

Impact of GST on Petroleum Sector

The Committee note that as per the GST Constitutional (Amendment) Bill, 2016, all petroleum products and services are covered under the ambit of GST except supplies of crude oil, MS, HSD, ATF and Natural Gas which will be brought under GST at a later date. The Committee feel that under the GST regime, the tax liability of the upstream oil PSUs will increase as the GST rate on inputs is expected to be higher than the prevailing rate of taxation. In addition, if crude oil and natural gas are kept out of GST, the upstream oil companies like ONGC and OIL cannot claim credit for their money spent towards VAT on services hired and goods used for production of petroleum products. Moreover, the inputs in the form of equipments and services will also attract GST but the main output, i.e., crude oil will be out of the purview of GST. The Committee also note that in downstream sector, in the course of refining crude oil, several products are manufactured some of which will be under GST and some will be out of the purview of GST. This will result in distortions in pricing of the product as well as increase in input cost of the oil companies. Also, they have to maintain separate accounting for GST and non-GST accounts.

The Committee feel that the GST will lead to increase in operational cost of the petroleum products and can have cascading effect across the supply chain. The Committee are of the view that the oil PSUs companies should be able to get adjustment of full VAT credit for the total amount against VAT that have been paid by them on inputs and services. The Committee, therefore, recommend that the MoPNG should take up the matter of providing full credit of VAT to the oil companies against VAT paid by them with the Ministry of Finance and a mutually acceptable solution to the problem be found.

Recommendation No. 10

Merger of Oil PSUs & formation of an 'Oil Major'

The Committee note that the Government has announced in the budget that it is considering to strengthen the Central Public Sector Enterprises (CPSE) through consolidations, mergers and acquisitions which will give them capacity to bear higher risks, avail economies of scale, take higher investment decisions and create more value for stakeholders. The objective of the Government is to create an 'Oil Major' in petroleum sector which will be able to match the performance of international and domestic private sector oil and gas companies. The integration is expected to result in several benefits to the companies to withstand the volatility in the international prices of crude oil and natural gas, strengthen balance sheets, synergies across value chains, sharing of skills, research and development, infrastructure, increase in overall capacity and an edge during bidding for E&P assets. The entire process of integration may result in reshaping of the existing petroleum architecture in the country which is currently designed on the basis of upstream and downstream operations.

Though the exact contours of the 'integration' process is yet to become clear, the Committee opine that creation of an 'Oil Major' could have an beneficial impact on the domestic petroleum sector scenario and immensely improve the competitiveness of the Oil PSU's on global stage. The Committee, however, feel that the Government needs to proceed with caution as there are several challenges such as integration of human resources, creating synergies in companies having diverse operations, etc., which needs to be overcome for successful implementation of such an endeavour. The Committee, therefore, would suggest that Government should come out with a clear roadmap and framework with objective parameters at an early date for creation of such an 'Oil Major' in order to remove ambiguity and apprehensions and the Ministry/PSU's should also consult employees of the companies to allay their fears about mergers and consolidation exercise. The Committee further recommend that abundant caution should be exercised in order to ensure that the integration

exercise is not done in undue haste but handled without any disadvantage for the existing human resources of the PSUs and make it a win-win situation.

Recommendation No. 11

Share of Gas in Energy Mix

The Committee note that the share of natural gas in the primary energy mix of the country was 7.1% in 2014. Though the share of gas consumption in the energy mix of the country has registered some increase during the last ten years, it has declined in the last five years. Similarly the domestic production of natural gas has also declined over last few years. From 35.407 BCM in 2013-14 it has declined to 32.248 BCM in 2015-16 and is projected to decline further in the coming years. The reasons of decline has been cited as sharp decline in production in KG deep-water block operated by the RIL, natural decline in the major gas producing fields and delay in commencement of production from Eastern Offshore Fields. As a result of decline in domestic production and domestic consumption because of various factors, infrastructures created for natural gas are being operated at sub-optimal level. The Committee also note that due to a number of factors, such as, carbon content per unit of heat and lower cost of calorific value, gas is a preferable source of fuel compared to oil. Taking all this factors in account and also that the Government's vision of having the share of natural gas in the primary energy mix of the Country at 15% by 2030, the Committee are concerned that adequate efforts are not being taken to increase domestic production of gas even though potential for the same exists in the Country. It is also required to fulfil the Government's vision of reducing import dependency by 10% by the year 2022. The Committee feels that the Government should take effective steps to increase the domestic consumption of gas by expanding the CGD and PNG/CNG networks to various parts of the Country not only because gas being a cleaner and greener fuel but also because sufficient capabilities to increase domestic production of gas exist in the Country. The Committee, accordingly, recommend that all bottlenecks preventing production from the Eastern Offshore Gas fields are removed at an early date to boost domestic production of gas. The Committee also recommend that domestic

consumption of gas in building, industry and transport sectors should be incentivized by the Government through policy interventions.

Recommendation No. 12

Pradhan Mantri Urja Ganga (PMUG) Project

The Committee note that Pradhan Mantri Urja Ganga (PMUG) Project is being implemented in order to develop gas pipeline network in the Eastern Part of the Country. The pipeline will connect Jagdishpur-Haldia and Bokaro-Dhamra. The Committee also note that for the first time, Government is providing capital grant of 40% (Rs. 5176 crore) of the total estimated cost of Rs. 12490 crore for developing this gas pipeline. The Committee observe that in RE 2016-17, Rs. 450 crore was provided for the project and during this year (2017-18) BE of Rs. 1200 crore has been provided. The project is likely to be completed by the year 2020. The Committee further note that the objective of the project is to connect Eastern part of the country with Natural Gas Grid and ensure the availability of clean and eco-friendly fuel, i.e., Natural Gas to the industrial, commercial, domestic and transport sectors in the States of Uttar Pradesh, Bihar, Jharkhand, Odisha and West Bengal. GAIL has been entrusted with the responsibility of implementing the project. The Committee understand that the Capital Grant will encourage the supply of eco-friendly fuel at affordable tariffs to industries and will encourage industrial development, particularly the fertilizer plants in Gorakhpur, Barauni and Sindri. The project will also help expand CGD project to cities in Eastern India, namely, Varanasi, Patna, Jamshedpur, Cuttack, Ranchi and Kolkata. The Committee appreciate that Government is taking initiative to connect the eastern region of the Country with gas pipelines which will result in greater use of clean fuel and reduce the use of Kerosene and firewood. The Committee recommend that the project should be implemented within the timeline prescribed and without any cost escalation. To ensure this, Ministry needs to have a robust monitoring mechanism and the project progress should be assessed periodically.

Recommendation No. 13

Expansion of City Gas Distribution/PNG Network

The Committee note that out of 75 Geographical Areas (GAs) authorized by PNGRB for development of CGD networks in the country, 57 GAs have been covered by CNG by 2015-16 and remaining GAs are likely to be covered during 2016-17. The Committee also note that 8th bidding round has been launched recently for seven new GAs (8 districts) across the country i.e. Karnal, Ambala Kurukshetra, South Goa, Baghpat, Yanam, Kolhapur and Bulandshahar. The Committee understand that PNGRB has envisaged a phased roll out plan for development of CGD networks in various parts of the country depending on the natural gas pipeline connectivity/natural gas availability and feasibility for grant of authorization to develop CGD networks in the country. As regards CNG, the Committee note that a total of 1167 CNG stations were operating in the Country catering to the fuel requirements of 28,44,616 CNG vehicles through 32 CGD entities as on September 2016. As regards domestic PNG connections, there were 34.21 lakh connections as on 1 January 2017. A total of about 78 lakh PNG domestic connections are targeted to be provided by the end of 2017 and about 97 lakh connections are targeted to be provided till the year 2021. The Committee feel that the implementation of CGD projects is very slow and are unable to understand as to how the target of providing the 43.79 lakh new connections by December 2017 is going to be achieved. The Committee expect the Ministry to share its plan in this regard.

The Committee understand that the total quantity of natural gas required for CNG and PNG under City Gas Distribution is to be provided from the domestically produced natural gas. The availability of Gas to be supplied in case the targeted PNG connections are made functional is also an issue. The Committee, therefore, recommend that availability of adequate natural gas should also be ensured alongwith necessary infrastructure for expansion of CGD and PNG projects in order to enable people living in all parts of the Country have

access to efficient and cleaner fuels. Also Ministry should monitor the progress of such projects so that the prescribed targets are achieved.

Recommendation No. 14

Reduction of Customs Duty on LNG

The Committee note that the Government has proposed reduction of Customs duty on LNG from 5% to 2.5% during the financial year 2017-18. The reduction in duty is expected to result in savings of about Rs. 900 crore to consumers based on LNG consumption during the year 2015-16. As the reduction will make LNG price competitive to alternate fuels, the move is expected to give boost to gas as fuel in industries such as steel, fertilizer, power, etc. which are major users of LNG. It will provide incentive to industries to switch over to LNG from other competing fuels. The Committee feel that the reduction can help revive idle gas-based power plants. The Committee appreciate that the move will result in greater use of LNG which is more environment-friendly compared to other conventional fuels and will also help the nation to honour its commitment of limiting carbon emissions. Further, in view of the Committee, increase in use of gas is necessary to improve the share of gas in energy mix of the Country and the increase in demand for LNG may spur the production of gas which is domestically available. It may also lead to creation of mid-stream infrastructure from LNG terminals to gas pipelines and city gas distribution networks. While steps such as reduction of duties may make gas utilization attractive and viable, the Committee recommend that the Government needs to take more policy measures and make gas an attractive choice of industries.

Recommendation No. 15

Exploration and Production of Crude Oil and Natural Gas

The Committee note that in last three years the total crude oil production in India was 36.95 MMT in 2015-16, 37.46 MMT in 2014-15 and 37.78 MMT in 2013-14 respectively. In 2016-17 (upto December 2016), the production was 27.04 MMT. Similarly, the production of natural gas in last three years has been 97 MMSCMD in 2013-14, 92.2 MMSCMD in 2014-15 and 88.1 MMSCMD in 2015-16 while in 2016-17 (upto December 2016), the production of natural gas was 86.9 MMSCMD. It can be seen that crude oil production show either stagnant and slightly declining trend and the scenario is same for natural gas also. Crude oil production is declining because major production fields of the country, namely, Mumbai High, Gujarat and NE region have aged and production in those fields are declining after having peaked. The sharp fall in natural gas production is being attributed to decline in production coming from KG deep-water block operated by RIL, natural decline in old gas fields, accidents in Andhra Pradesh gas fields (Tatipaka) and bandhs/blockades in NE region. Even the projected production figures of crude oil show that the production in near future is going to decline. The Committee understand that the DGH foresees increase in hydrocarbon production mostly from the natural gas as development plans of regular and small fields have been finalised. Some production may also come from CBM gas. The Committee are of the view that a large part of the Country is still unexplored and adequate efforts should be made for exploration of all parts of the country and the way to increase the domestic production of crude oil and natural gas is to allocate sufficient funds for the purpose and ensuring that the funds are fruitfully spent. Similarly, the IOR/EOR technologies in order to get more production from the existing and ageing fields should also be a priority. In the year 2015-16, about 1.32 MMT of oil production was achieved through IOR/EOR technologies alone. The Committee recommend that the field development plans in respect of eastern-offshore fields should be closely monitored for production. The Committee recommend that state-of-the-art IOR/EOR technologies should be implemented in the oil fields

from where production is stagnating or declining by making adequate allocation in the IEBR of the respective PSUs.

Recommendation No. 16

Allocation of Blocks under HELP

The Committee note that the Government has come out with a number of policy initiatives for exploration and production of crude oil and gas. Hydrocarbon Exploration and Licensing Policy (HELP) is the latest policy brought in by the Government. This policy provides for single license for conventional and non-conventional hydrocarbons, marketing and pricing freedom and allows 100% FDI among other things. The award of blocks under this policy will commence once the Draft Model Revenue Sharing contract and Notice Inviting Offer are finalized and approved and Open Acreage Licensing Policy (OALP) is operationalised. The Committee are unhappy that allocation of blocks under licensing regimes take a very long time and start of production from those blocks take even more time. For instance, HELP was announced more than one year ago and till now bidding under the policy is yet to take place as the required paperwork is not ready.

The Committee, therefore, recommend that Ministry should finalise the Revenue Sharing contract under HELP and also OALP without any further delay and announce launch for bidding and all the measures that are required to be taken for awarding of blocks should be kept ready.

Recommendation No. 17

Discovered Small Field Policy

The Committee note that Discovered Small Field Policy aims at monetizing 67 discovered small fields by ONGC and OIL in a time bound manner to boost domestic production of Oil and Gas. This policy offers improved fiscal terms viz., no oil cess applicable on crude oil production, moderate royalty rates, no upfront signature bonus, pricing and marketing freedom for oil and gas and no carried interest by NOCs. Under the policy, attractive incentives are provided to the start-ups also. The Committee also note that the Government has launched the Discovered Small Field (DSF) Bid Round- 2016 in May 2016 which was the first bidding round in six years. Under the DSF Bid round, 67 fields clubbed under 46 contract areas were put on offer which included areas located Onland, Shallow water offshore and in Deepwater Offshore. After examining the bids as per prescribed guidelines, the award of contracts in 31 contract areas has been approved by the Union Cabinet. The Committee understand that the awarded fields would result in adding 15000 Barrel of Oil Per Day (BOPD) and 2 MMSCMD of gas to the domestic production of oil and gas.

The Committee feel that early start of production is necessary from these fields because the domestic production of oil and gas are declining and production from all available sources is essential for meeting the Government's vision of reducing import by 10% by 2022. The Committee, therefore, recommend that the awarded blocks should be brought under production through pro-active measures. Further, the Committee also recommend that the remaining contract areas should also be put under bid again in order to ensure that there is no inordinate delay in monetizing those fields.

Recommendation No. 18

Ethanol Blended Petrol

The Committee note that Ethanol Blended Programme was launched in the year 2003 with an objective of blending ethanol with petrol. Currently the programme is being implemented in 21 States and 4 UTs with a target of achieving 5% blending and progressively increasing to 10% blending. As per projections, the requirement for ethanol to achieve 10% blending is 280 crore litres. The Committee note that in the year 2015-16 (from 1 December 2015 to 30th November 2016), a total of 111 crore litre ethanol was procured by the OMCs which is about 40% of the requisite quantity and will be sufficient for blending of only 3.5%. The blending percentage needs to be increased to fulfill the Government's target and also as a component of import reduction. The low procurement has been attributed to lower cane production due to drought in Maharashtra and Karnataka and also due to demands from potable and chemicals sector. As the domestic sourcing of ethanol is continuously failing to achieve the target, there is a need to look at other alternatives. The Committee note that since 10.12.2014, Government has allowed procurement of ethanol produced from other non-food feedstocks besides molasses like cellulosic and lingo-cellulosic materials including from petrochemicals route. The Committee further note that twelve 2G ethanol bio-refineries in 11 States are being established. The Committee appreciate that such steps are required in view of consistent under-supply of domestic ethanol from traditional sources. To achieve the target of 5% blending during the year 2017-18 itself and 10% blending by 2020, permission for imports of ethanol, if possible, may also be given. The Committee recommend that the proposed 2G ethanol bio-refineries should be completed by the OMCs on priority basis without any time and cost overrun.

Recommendation No. 19

Development of Bio-fuels

The Committee note that with a view to encourage production of other bio-fuels such as bio-diesel in the Country, Bio-diesel Purchase Policy has been announced which provides guidelines for OMCs to procure bio-diesel for blending with High Speed Diesel (HSD) to the extent of 5%. Subsequently, sale of Bio-Diesel (B100) by private manufacturers to bulk buyers has also been allowed. Similarly, Public sector OMCs have been permitted to retail bio-diesel. The Committee appreciate the measures being taken by the Government to promote the use of alternative or Bio-fuels. The Committee recommend that the production of bio-diesel in the Country should be promoted by the Government OMCs through appropriate interventions.

Recommendation No. 20

National Seismic Programme- Reassessment of Hydrocarbon Resources and National Data Repository

The Committee note that after almost two decades of last such exercise, the Directorate-General of Hydrocarbons (DGH) is undertaking a Reassessment of Hydrocarbon Resources in all 26 sedimentary basins of the Country through a Multi-Organisation Team with the collaboration of ONGC and OIL. The project commenced in September 2015 and is scheduled to be completed in 27 months, i.e., by November 2017. The Committee further note that so far, re-assessment study for ten basins have been completed and their draft reports are under preparation. At present, the study for ten more basins is in progress. The Committee also note that the National Data Repository (NDR) has been set up as a part of National Knowledge Hub to populate all the geo-scientific data available in the Country. Its aim is to provide reliable exploration and production data for India for seamless access and on-line data management to the E&P Companies. It will validate, store, maintain and reproduce high quality and reliable geo-scientific data, facilitate efficient data reporting, data exchange, and data trading among existing players, improve DGH's ability to monitor and control the E&P activities and reporting, encourage new E&P activities by providing high quality and reliable data and strengthen overall geo-scientific activities in India.

NDR Project is currently being executed in the DGH premises in Noida. The Committee understand that initial works relating to NDR project has been completed and it has been populated with data. NDR is ready for providing data to various E&P operators through launching of OALP/HELP programme. The Committee feel that having an NDR for India will enhance prospects of petroleum exploration and facilitate the Bidding Rounds by improving the availability of quality data. It will also help the Country compete effectively in the hydrocarbon exploration and production sector.

The Committee note that two proposals have been received for Geo-Scientific Data generation for hydrocarbons in Indian sedimentary basins and

desire that these proposals may be evaluated so that funds and physical targets are achieved for successful completion.

The Committee, therefore, recommend that the project relating to Reassessment of Hydrocarbon Resources be completed without any time overrun and proper guidelines for using the data contained in the NDR should be framed at the earliest so that exploration exercises can be undertaken more effectively.

Recommendation No. 21

IEBR of the Oil PSUs

The Committee note that the actual IEBR expenditure of the oil PSUs in the year 2015-16 was Rs. 97223.32 crore. In the year 2016-17, the BE figures are Rs. 87214.56 crore and RE figure is Rs. 104673.56 crore. The BE for 2017-18 has been reduced to Rs. 86027.29 crore. The Committee are unhappy at such great variation in figures for BE, RE and Actual in the last two years as it shows poor planning on the part of PSUs. The Committee also note that the outlay for investment in public sector undertakings during 2017-18 has been reduced from BE 2016-17 (Rs. 60131.45 crore) and RE 2016-17 (Rs. 75731.59 crore) to Rs. 52749.14 crore. If sectoral allocations are analysed, it may be seen that there is substantial variation in allocations for 'Refinery and Marketing' sector and 'Petrochemicals' sector. In 2014-15, in 'Refinery and Marketing' sector the 'Actual' expenditure was almost 30% higher than the BE while in case of 'Petrochemicals' sector the 'Actual' expenditure was three times more than the BE amount. As regards allocation in 2016-17 in Exploration sector, the RE is Rs. 75731.59 crore which is almost 25% more than the BE amount. IN BE 2017-18, the allocation for Exploration is again reduced by more than 30% to Rs. 52749.14 crore. The reduction in allocation for exploration goes against the necessity of expanding exploration activities in newer areas in order to enhance domestic production. The Committee are concerned at such high mismatch of figures at BE and RE stage.

In case of IEBR of oil PSUs, the comparison of figures of BE, RE and Actuals also show substantial variation. In case of HPCL, the actual expenditure in Refining & Marketing Sector 2015-16 was Rs. 5896.90 crore but in BE 2016-17 it was reduced to Rs. 1907.24 crore. At the RE stage, however, the amount was increased again to Rs. 5642.52 crore. Rs. 7073.75 crore has been allocated for BE 2017-18. For BPCL, the actual expenditure in Refining & Marketing Sector in 2015-16 was Rs. 6933 crore. In BE 2016-17, it was increased to Rs. 9797 crore but at RE stage, it had to be reduced to Rs. 6832.80 crore. Rs. 5600.64 crore has been

allocated in BE 2017-18. For upstream PSUs like OIL, the situation is same. For OIL, the allocation in Exploration & Production sector in the BE 2016-17 was Rs. 11381.89 crore while at RE stage it was enhanced by almost 50% to Rs. 17012.73 crore. In BE 2017-18, the amount has again been reduced to Rs. 9252.34 crore.

The Committee are concerned to find substantial variation in allocations and expenditure of the IEBR of the PSUs. The Committee feel that this reflects poor planning on the part of PSUs. The Committee, therefore recommend that the financial estimates of the oil PSUs should be prepared with adequate caution to avoid such substantial variations. The Committee also recommend that the activities proposed for a particular year in respect of the PSUs for which funds have been allocated should normally be undertaken.

Recommendation No. 22

International Cooperation in Petroleum Sector

The Committee note that India, being one of the fastest growing economies of the world, will require assured supply of hydrocarbons in future to sustain its growth. It has only 0.3% of world's proven oil reserves but accounts for 4.5% of global oil consumption. Similarly it has 0.8% of natural gas reserves but accounts for 1.5% of global gas consumption. The Committee further note that the high dependence on imported oil and gas affects energy security and overall financial health. To meet these challenges, the Government needs to have robust oil diplomacy and a global vision. The Committee also understand that the Government is actively engaged in bilateral and multilateral cooperation in hydrocarbon sector with foreign countries. The Committee understand that the Oil PSUs are being encouraged to aggressively pursue opportunities to acquire hydrocarbon assets overseas. The Committee are happy to note that Indian PSUs have acquired 29.9 per cent stake in Tass-yurakh and 49.9 per cent stake in Vankorneft oil fields of Russia at an investment of US$5.46 billion which will translate in to equity oil of 15.18 MMTOE. The committee also feel that Government should also engage with countries for long term supply agreements for natural gas and crude oil. The hosting of events like PETROTECH, International Oil & Gas Conferences and Exhibition enables national and international experts in the oil & gas industry to exchange views and share knowledge, expertise and experiences. The Committee appreciate growing engagements with African, South-east Asian and Latin American countries in Hydrocarbon sector. The Committee recommend that the bilateral and multilateral engagements with hydrocarbon rich countries be intensified and Ministry should institute a robust mechanism to regularly follow up on agreements and MoUs signed and further build the momentum.

Recommendation No. 23

Make in India Initiative in Petroleum Sector

The Committee note that the 'Make in India' initiative was launched by the Prime Minister in September 2014 for facilitating investment, fostering innovation, enhancing skill development, protecting intellectual property and building best-in-class manufacturing infrastructure in India. The Committee also note that the MoPNG has constituted a Steering Committee to roll out the 'Make in India' campaign in the oil and gas industry. The steering Committee consists of the representatives of the Ministry and the Oil PSUs. It has the mandate to devise a strategy and develop a roadmap for successful implementation of the 'Make in India' campaign in the oil and gas industry. Sub-Groups have been set up for Upstream, Midstream and Downstream sectors. The 'Make in India' endeavor in Oil & Gas sector aims to leverage the Increase in demand from increase in investment for indigenization. The Committee understand that studies for setting up dedicated manufacturing zones/ clusters catering to Oil Field Services will be undertaken under the initiative. Further, upstream, midstream and downstream oil companies have formed Indigenous Development Group (INDEG) to promote indigenization and are working towards import substitution. Oil and Gas PSUs have also signed MoUs with Global Players with the aim of enhancing production and progressive import substitution. The Committee feel that in midstream operations, India has a robust infrastructure in place that can make it a regional refinery hub as import content in refinery equipment and technology has come down considerably. Similarly, the expertise of our companies has been proved in high-end technologies such as construction of strategic oil caverns. In this context, the Committee feel that the 'Make in India' initiative is a great opportunity to not only achieve 100% indigenous content in all sectors of hydrocarbon in the Country but also to export technology as well as products from India. The Committee, therefore, recommend that the Government should provide special incentives to the mid-stream operations to help the Country develop as a refinery hub. The Committee also recommend that special measures should be taken to

increase indigenous content in the upstream operations such as manufacturing of rigs and other drilling equipments.

Recommendation No. 24

Skill Development in Petroleum Sector

The Committee note that the Skill India initiative was launched by the Government in July, 2015 with the aim of developing convergence across sectors and states in terms of skill training activities. The Committee also note that the Hydrocarbon Sector Skill Council (HSSC) has been set up in April 2016 which prepares training for certification based skill development programmes. The Committee further note that an MoU for collaboration in skill development was signed between the MoPNG and the Ministry of Skill Development & Entrepreneurship in November 2016 which establishes a broad framework of collaboration for providing appropriate skill development framework for supply of skilled manpower through vocational and technical training, skill up-gradation, building of new skills, mapping of existing skills and their certification. The Committee appreciate that under the Skill Development Initiative, Oil PSUs are in the process of setting up 7 Skill Development Institutes (SDIs) in the country. The SDIs in Bhubaneshwar, Visakhapatnam, Nagaram (AP) and Kochi have become operational while those at Ahmedabad, Guwahati and Rae Bareli are being established. Though there is no separate allocation of funds for the skill development initiatives, they are being funded through HSSC corpus, which is funded by the Oil and Gas companies both Public and Private sector. The Committee are happy that Oil PSUs are contributing in establishing linkages between community and industry through vocational training and skill upgradation. This will help them get supply of skilled manpower in the long run. The Committee recommend that SDIs should be established in all parts of the Country including in remote and hill areas so that appropriate benefit of the industry may pass on to the local community in terms of skill development.

Recommendation No. 25

Trans-national Pipelines

The Committee note that Currently India is the third largest energy consuming country in the world and total consumption of petroleum products is likely to increase by about 60% to 368 MMT by 2024-25. The current consumption level of petroleum products is 226 MMT. India being an energy importing country, about 80% of our requirements of crude oil and a little less than 50% in case of natural gas are being bought from other countries. Notwithstanding the Government's vision of reducing imports by 10% by the year 2022, in the foreseeable future, India is likely to continue being heavily reliant on imports of crude oil and natural gas. Moreover, India has had strong bilateral relations with the Central Asian republics which have huge surplus natural gas reserves. They may be a reliable source for meeting our long term energy needs and strengthen our energy security. The Committee understand that currently two trans-national pipelines are under consideration. The Pipeline Consortium for Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, TAPI Pipeline Company Limited (TPCL) was incorporated in Isle of Man, a British Crown dependency and the Share Holders Agreement of TPCL has been signed in December 2015. The shareholding percentage in the TPCL would be Turkmenistan 85%, India 5%, Pakistan 5% and Afghanistan 5%. The construction of pipeline has commenced in December 2015 and is likely to be completed in about 7 years. The second pipeline known as IPI Pipeline (Iran-Pakistan-India) was envisaged to transport natural gas from South Pars gas fields of Iran to Pakistan and India with a carrying capacity of 60 MMSCMD of natural gas, to be equally supplied to India and Pakistan. However, there has been little or no progress in the project since 2008 for a number of reasons. The Committee feel that trans-national pipelines are important elements of national energy security and they need to be pursued vigorously. The Committee, therefore, recommend that the TAPI project needs to be monitored closely in collaboration with other participating countries in order to ensure that the project is completed in time. As for IPI pipeline project, the

Government should examine the idea of reviving the project as international conditions have become favourable following lifting of sanctions against Iran.

New Delhi;
<u>16 March, 2017</u>
25 Phalguna,1938 (Saka)

PRALHAD JOSHI,,
Chairperson,
Standing Committee on
Petroleum & Natural Gas.

Annexure- I

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2016-17)

Tenth Sitting
(21.02.2017)

The Committee sat on Tuesday, the 21 February, 2017 from 1100 hrs. to 1400 hrs. in Committee Room 'G-074', Parliament Library Building, New Delhi.

PRESENT

Shri Pralhad Joshi - Chairperson

MEMBERS

LOK SABHA

2 Dr. Ravindra Babu Pandula
3 Shri Kalikesh N. Singh Deo
4 Shri Elumalai V.
5 Shri Naranbhai Kachhadiya
6 Dr. Thokchom Meinya
7 Smt. Pratima Mondal
8 Smt. Jayshreeben Patel
9 Shri Rajendra Agrawal
10 Shri Rajesh Verma
11 Shri Om Prakash Yadav
12 Shri Laxmi Narayan Yadav

RAJYA SABHA

13 Shri Bhubaneshwar Kalita
14 Shri Dilipbhai Pandya
15 Shri V. Lakshmikantha Rao
16 Shri V. Vijayasai Reddy
17 Mahant Shambhuprasadji B. Tundiya
18 Shri A. Vijayakumar

SECRETARIAT

1 Shri A.K. Singh - Addl. Secretary
2 Dr. Ram Raj Rai - Director
3 Shri H. Ram Prakash - Additional Director
4 Shri Sujay Kumar - Under Secretary

Representatives of the Ministry of Petroleum & Natural Gas

1 Shri K.D. Tripathi - Secretary
2 Shri Ajay Prakash Sawhney - Addl. Secretary
3 Shri Anant Kumar Singh - Addl. Secretary & Financial Advisor
4 Ms. Urvashi Sadhwani - Sr. Advisor
5 Shri Sandeep Poundrik - Joint Secretary (Ref.)

6	Shri Amar Nath	-	Joint Secretary (E)
7	Shri Ashutosh Jindal	-	Joint Secretary (Marketing)
8	Shri Sunjay Sudhir	-	Joint Secretary (IC)
9	Ms. Sushma Rath	-	Joint Secretary (Gen.)
10	Shri Ashish Chaterjee	-	Joint Secretary (GP) & Secretary, OIDB
11	Ms. Perin Devi	-	Director (IFD)

Representatives of Public Sector Undertakings and other Organisations

1	Shri D.K. Sarraf	-	CMD, ONGC
2	Shri M.K. Surana	-	CMD, HPCL
3	Shri Atanu Chakraborty	-	DG, DGH
4	Shri H. Kumar	-	MD, MRPL
5	Shri Gautam Roy	-	MD, CPCL
6	Shri Prabal Basu	-	CMD, Balmer Lawrie & Co. Ltd.
7	Ms. Atreyee Das	-	DG, PPAC
8	Shri Rajan K. Pillai	-	CEO, ISPRL
9	Ms. Vandana Sharma	-	Secretary, PNGRB
10	Shri R. Ramachandran	-	Director, BPCL
11	Shri P.K. Bhattacharya	-	Director, RGIPT
12	Shri P.K. Sharma	-	Director (Operations.), OIL
13	Shri Sanjiv Singh	-	Director (Refineries), IOCL
14	Dr. A. Karnatak	-	Director (Project), GAIL
15	Shri Ram Singh	-	Director (Fin.), EIL
16	Shri S.K. Barua	-	Director (Fin.), NRL
17	Shri P.K. Rao	-	Director (Ope.), OVL

2. At the outset, the Hon'ble Chairperson of the Committee welcomed Members of the Committee and representatives of the Ministry of P&NG and officials of PSUs to the sitting of the Committee. Hon’ble Chairperson also observed that many CMDs have sought exemption from attending the sitting of the Committee on the pretext that they are part of a delegation to Myanmar with the Hon'ble Petroleum Minister. Hon'ble Chairman mentioned that while the O.M. regarding the sitting was sent on 3rd February, CMDs of PSUs did not send any communication regarding their inability to attend the sitting till 17th February. He further directed that another sitting of the Committee will be held on 1st March where all the CMDs have to be present.

3. Thereafter, the representatives of the Ministry made a powerpoint presentation on the subject ‘Demands for Grants 2017-18’. During the discussion, members sought clarification on issues such as integration of oil PSUs into an ‘Oil Major’, cut in subsidised kerosene and use DBTL for paying subsidy, PMUY, reduction of customs

duty on LNG, savings made through PAHAL scheme and implementation of Government's vision of reducing imports by 10% by the year 2022.

4. Further, members also sought information on matters such as expansion of CGD to various states including in Bihar and Odisha, availability of LNG and CNG for the purpose, status of EBP programme, performance of ONGC with respect to drilling of wells and 3D seismic survey, infrastructure relating to CBM gas, reasons for GSPC-ONGC deal in KG basin, expenditure on filling of oil in strategic oil caverns, reduction of *ad valorem* cess on crude oil from 20% to 10% to ensure viability of oil companies, status of Petroleum University in Andhra Pradesh, issue of charging service tax on royalty, GST in petroleum sector, status of transnational Pipelines, budget allocation for vision 2030 for North-Eastern region, subsidies being paid in the North-Eastern Region, Exclusion of North-Eastern Region from Auto Fuel Vision & Policy 2025, financial status of Biecco Lawrie, Pradhan Mantri Urja Ganga Yojana, reassessment of Hydrocarbon resources, status of National Data Repository, etc. MoP&NG was asked to submit the detailed replies in writting the points raised by Hon'ble Members within a week's time.

5. A copy of the verbatim proceedings of the sitting has been kept for record.

The Committee then adjourned

Annexure-II

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2016-17)

Eleventh Sitting (01.03.2017)

The Committee sat on Wednesday, the 1 March, 2017 from 1110 hrs. to 1155 hrs. in Committee Room 'G-074', Parliament Library Building, New Delhi.

PRESENT

Shri Pralhad Joshi - Chairperson

MEMBERS

LOK SABHA

2 Dr. Ravindra Babu Pandula
3 Shri P.K. Biju
4 Shri Kalikesh N. Singh Deo
5 Smt. Rama Devi
6 Shri Elumalai V.
7 Shri Naranbhai Kachhadiya
8 Smt. Pratima Mondal
9 Smt. Jayshreeben Patel
10 Shri Rajendra Agrawal
11 Shri Arvind Sawant
12 Shri Raju Shetti
13 Dr. Bhola Singh (Begusarai)
14 Shri Ravneet Singh
15 Shri Kamakhya Prasad Tasa
16 Shri Rajesh Verma
17 Shri Om Prakash Yadav
18 Shri Laxmi Narayan Yadav
19 Shri A.T. Nana Patil

RAJYA SABHA

20 Shri Bhubaneshwar Kalita
21 Shri Dilipbhai Pandya
22 Shri V. Lakshmikantha Rao
23 Shri V. Vijayasai Reddy
24 Mahant Shambhuprasadji B. Tundiya
25 Shri A. Vijayakumar

SECRETARIAT

1 Dr. Ram Raj Rai - Director
2 Shri H. Ram Prakash - Additional Director
3 Shri Sujay Kumar - Under Secretary

Representatives of the Ministry of Finance

1	Shri Upendra Gupta	-	Commissioner (GST)
2	Shri G.G. Pai	-	Director (TRU)

2. At the outset, the Hon'ble Chairperson of the Committee welcomed Members of the Committee and representatives of the Ministry of Finance to the sitting of the Committee. He explained that representatives of the Ministry of Finance have been invited in order to clarify to the Committee regarding issues like impact of GST on Petroleum Products and Cess on Crude oil.

3. In his opening remarks, Hon’ble Chairperson observed that five petroleum products are proposed to be kept out of GST and the rest will be under the ambit of GST and wanted to know the impact of this proposal as this move will affect both upstream companies and downstream companies as these are final products in their production activities in the case of upstream companies and input for refining and marketing companies. Subsequently, Members sought clarifications on issues such as the manner of implementation of the GST with particular reference to the necessity of oil PSUs for maintaining dual accounts as some products are included in the GST and some are not, credit of taxes paid on products part of which is included under GST and ways to avoid cascading effect of GST imposition on petroleum products, inflation due to higher GST rate than the prevailing as also due to non availability of credit etc.

4. Further, Members also raised queries regarding method of GST computation, loss to states on account of GST and payment of compensation to them, status of Union Territories in so far as payment of compensation is concerned, impact of GST on CENVAT and other central taxes, levy of 20% cess on crude oil, payment of service tax on royalty and computation of loss in case the cess on crude oil is reduced. At the end, MoF was asked to submit detailed replies in writing to the points raised by Hon'ble Members within a week's time to the Secretariat.

5. A copy of the verbatim proceedings of the sitting has been kept for record.

The Committee then adjourned

Annexure-III

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2016-17)

Twelfth Sitting (01.03.2017)

The Committee sat on Wednesday, the 1 March, 2017 from 1200 hrs. to 1410 hrs. in Committee Room 'G-074', Parliament Library Building, New Delhi.

PRESENT

Shri Pralhad Joshi - Chairperson

MEMBERS

LOK SABHA

2 Dr. Ravindra Babu Pandula
3 Shri P.K. Biju
4 Shri Kalikesh N. Singh Deo
5 Smt. Rama Devi
6 Shri Elumalai V.
7 Shri Naranbhai Kachhadiya
8 Smt. Pratima Mondal
9 Smt. Jayshreeben Patel
10 Shri Rajendra Agrawal
11 Shri Arvind Sawant
12 Shri Raju Shetti
13 Dr. Bhola Singh (Begusarai)
14 Shri Ravneet Singh
15 Shri Kamakhya Prasad Tasa
16 Shri Rajesh Verma
17 Shri Om Prakash Yadav
18 Shri Laxmi Narayan Yadav
19 Shri A.T. Nana Patil

RAJYA SABHA

20 Shri Bhubaneshwar Kalita
21 Shri Dilipbhai Pandya
22 Shri V. Lakshmikantha Rao
23 Shri V. Vijayasai Reddy
24 Mahant Shambhuprasadji B. Tundiya
25 Shri A. Vijayakumar

SECRETARIAT

1 Dr. Ram Raj Rai - Director
2 Shri H. Ram Prakash - Additional Director
3 Shri Sujay Kumar - Under Secretary

Representatives of the Ministry of Petroleum & Natural Gas

1	Shri K.D. Tripathi	-	Secretary
2	Shri Anant Kumar Singh	-	Addl. Secretary & Financial Advisor
3	Shri A.P. Sawhney	-	Addl. Secretary
4	Ms. Urvashi Sadhwani	-	Sr. Advisor
5	Shri Sandeep Poundrik	-	Joint Secretary (Ref.)
6	Shri Amar Nath	-	Joint Secretary (E)
7	Shri Ashutosh Jindal	-	Joint Secretary (Marketing)
8	Shri Sunjay Sudhir	-	Joint Secretary (IC)
9	Shri Ashish Chaterjee	-	Joint Secretary (GP) & Secretary, OIDB
10	Ms. Bandhula Sagar	-	CCA (MoPNG)
11	Ms. Indrani Kaushal	-	EA (MoPNG)
12	Ms. Perin Devi	-	Director (IFD)

Representatives of Public Sector Undertakings and other Organisations

1	Shri B.C. Tripathi	-	CMD, GAIL
2	Shri D.K. Sarraf	-	CMD, ONGC
3	Shri B. Ashok	-	CMD, IOCL
4	Shri M.K. Surana	-	CMD, HPCL
5	Shri D. Rajkumar	-	CMD, BPCL
6	Shri Utpal Bora	-	CMD, OIL
7	Shri Sanjay Gupta	-	CMD, EIL
8	Shri Narendra K. Verma	-	MD, OVL
9	Shri A. K. Sahoo	-	Director, MRPL
10	Shri Gautam Roy	-	MD, CPCL
11	Shri P. Padmanabhan	-	MD, NRL
12	Shri Prabal Basu	-	CMD, Balmer Lawrie & Co. Ltd.
13	Shri Atanu Chkraborty	-	DG, DGH
14	Ms. Atreyee Das	-	DG, PPAC
15	Ms. Vandana Sharma	-	Secretary, PNGRB
16	Shri Brijesh Kumar	-	ED, CHT
17	Shri V. Janardana Rao	-	ED, OISD
18	Shri Alok Tripathi	-	ED, PCRA
19	Shri Rajan K. Pillai	-	CEO, ISPRL
20	Shri C. Shankar	-	ED, SFPL
21	Shri P.K. Bhattacharya	-	Director, RGIPT

2. At the outset, the Hon'ble Chairperson of the Committee welcomed Members of the Committee and representatives of the Ministry of P&NG and officials of PSUs to the sitting of the Committee. After opening remarks by the Secretary, MoPNG, the CMDs of IOCL, HPCL, BPCL, GAIL, OIL and the Director of MRPL presented the details of physical and financial performance of their respective companies including their major activities during 2016-17 and the project to be undertaken during 2017-18.

3. In the similar context, the absence of representative of Petronet LNG Ltd. was discussed and the Members sought clarifications on the status of the companies as to whether it is Public or Private sector companies and also whether the procurement laws are applicable to such companies or not. It was decided that the Committee will examine the issue and the representatives of the Department of Public Enterprises under the Ministry of Heavy Industries and Public Enterprises will also be called before the Committee to clarify the issue.

4. Thereafter, Members sought clarifications on issues such as impact of cess on crude oil when the oil prices are showing an increasing trend, Pradhan Mantri Ujjwala Yojana (PMUY), extraction of hydrocarbons in the State of Tamil Nadu against the orders of the State Government, award of blocks under HELP, reports of HPCL merger with ONGC, and differences in figures relate to IEBR of PSUs given to the Committee in writting and those mentioned by the Ministry during the presentation; production, consumption and imports of crude oil, realisation of Government's vision of import reduction, revenue collection of the Government from royalty and other sources, progress of pipeline projects by GAIL, etc.

5. Members also sought clarifications from the PSUs on various issues such as exploration activities, Oil PSUs diversifying into renewables, purchase of rigs rather than hiring them, high capital expenditure by ONGC, slow progress of RGIPT in Assam, status of monetising of small and marginal fields, impact of low expenditure by IOCL and MRPL on the ongoing projects, CBM production in eastern India, progress in awarding of blocks under NELP and HELP and other licensing policies, progress of Petroleum University in Andhra Pradesh, selling of gas to companies operating in Taj Trapezium Area and the deal between ONGC and GSPC regarding assets of GSPC in KG basin area.

6. Members also raised the issue that their letters are not being replied to nor acknowledged by the PSUs in most of the cases. Hon’ble Chairperson directed that all letters of Hon’ble MPs of this Committee should be promptly acknowledged and properly responded to by the PSUs. MoP&NG was instructed to submit the detailed

replies in writing to the points raised by Hon'ble Members within a week's time to the Secretariat.

7. A copy of the verbatim proceedings of the sitting has been kept for record.

The Committee then adjourned

Annexure-IV

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2016-17)

Thirteenth Sitting (15.03.2017)

The Committee sat on Wednesday, the 15 March, 2017 from 1500 hrs. to 1620 hrs. in Committee Room '62', Parliament House, New Delhi.

PRESENT

Shri Pralhad Joshi - Chairperson

MEMBERS

LOK SABHA

2 Shri P.K. Biju

3 Shri Elumalai V.

4 Dr. Thokchom Meinya

5 Smt. Pratima Mondal

6 Smt. Jayshreeben Patel

7 Shri Rajendra Agrawal

8 Shri Arvind Sawant

9 Shri Ashok Mahadeorao Nete

10 Dr. Bhola Singh (Begusarai)

11 Shri Kamakhya Prasad Tasa

12 Shri Rajesh Verma

13 Shri A.T. Nana Patil

RAJYA SABHA

14 Shri Bhubaneshwar Kalita

15 Shri Dilipbhai Pandya

16 Shri Om Prakash Mathur

17 Shri V. Vijayasai Reddy

SECRETARIAT

1	Shri A.K. Singh	-	Additional Secretary
2	Dr. Ram Raj Rai	-	Director
3	Shri H. Ram Prakash	-	Additional Director
4	Shri Sujay Kumar	-	Under Secretary

2. At the outset, Hon'ble Chairperson welcomed the Members to the sitting of the Committee. The Committee then took up for consideration the draft Report on 'Demands for Grants (2017-18)' of MoPNG and adopted the same with minor modifications.

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

The Committee then adjourned.