P R E F A C E

The present publication is the twentieth of the annual series brought out by the Economics & Statistics Division which attempts to present detailed petroleum and natural gas statistics relating to Indian Economy and relevant International statistics. This publication, in line with our previous annual publications, tries to provide various key national petroleum and natural gas statistics both on financial as well as on calendar year basis, the former to meet the requirements of national planning and administration and the later to meet various obligations to U.N. and other international bodies and for purposes of maintaining historical continuity.

2. In this publication, in addition to statistics already covered in the previous issue, we have added a couple of new tables relating to (i) sectoral share in Commercial energy consumption during 1960-61 to 1984-85; (ii) estimates of commercial and non-commercial energy requirements in 1999-2000; (iii) developments of spot prices of key OPEC crude oil since 1984; (iv) economic indicators of OPEC nations during 1985; (v) Seventh Plan outlays (1985-90) and Annual Plan outlay/expenditure for 1985-86 and 1986-87 for Ministry of Petrleum & Natural Gas; (vi) domestic crude production profile - Seventh Plan 1985-90; (vii) domestic gas production profile - Seventh Plan 1985-90; (viii) targets for exploration activity in Seventh Plan; (ix) Seventh Plan targets for oil sector; (x) demand for petroleum products during 1984-85 to 1999-2000; (xi) import availability ratios of crude oil and POL products during 1979-80 to 1989-90; and (xii) estimated value of crude oil and POl products imports by the end of Seventh Plan period. It is hoped that officers and executives of the Government of India, Planning Commission, Oil Coordination Committee and other Organisation associated with the development of oil/natural gas industries would find this publication useful.

3. While we have taken all possible care to ensure accuracy in presentation of data contained in various tables, we would welcome suggestions from readers for rectification of any error or omission noticed by them.

Economics & Statistics Division
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October, 1986.

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SCOPE AND COVERAGE OF DATE PUBLISHED

1. Scope: The Indian Petroleum & Natural Gas Statistics presents comprehensive statistics on various aspects of Indian Petroleum and Natural Gas industries. The relevant data on international developments in respect of the said industries has also been presented in the publication.

2. Coverage: The Statistics presented in the publication covers the exploration, production, refining, marketing, etc. activities of petroleum and natural gas industries.

3. Source: The primary statistics in respect of petroleum and natural gas industries included in the publication is based on various returns submitted by the oil companies in the country to the Ministry of Petroleum & Natural Gas on voluntary basis under the directives issued by the Ministry to the said companies from time to time.

The sources of all the secondary data, including international statistics, incorporated in the publication, have been indicated at the bottom of tables showing such statistics.

4. Limitations: The data in respect of sales/consumption of petroleum products reflect despatches of various petroleum products from the sales depots of different oil companies to the bulk consumers/retail outlets. The State-wise sales/ consumption of such products show despatches to direct consumers/retail outlets meant for consumption/sales in a particular State.

5. Reference Period: All the key statistics for the domestic petroleum and natural gas industries have been presented on calendar (January-December) as well as on financial year (April-March) basis.

6. Natural Gas: The gross production of natural gas reflects grow withdrawals of natural gas from reservoir. On the other hand, the net production of natural gas shows gross withdrawal of natural gas from reservoirs less gas used for reinjection into reservoirs for pressuring and gas which is flared and/or vented.

The utilisation data for natural gas includes gas marketed, gas used for LPG extraction and gas consumed for field operations by the companies engaged in hydrocarbons exploration/production activities.

7. Petroleum Exports: The data relating to export of crude oil includes Indian crude oil (Bombay High) consigned for processing abroad. The refined petroleum products supplied by the Indian oil companies to Nepal have also been included under Indian exports from 1983-84 onward. Prior to 1983-84, the supplies of products to Nepal have not been included under exports.

8. Petroleum Imports: The crude oil and product import figures given in the publication include crude oil/POL products imported by the Indian oil companies on behalf of Nepal for processing of crude oil in Indian refineries and arranging supplies of desired products to Nepal. Petroleum products actually brought into the country from processing of Indian or international crudes at foreign refineries for Indian oil companies, have also been included under the product import figures.

9. Value of Import/Export: The value data in respect of exports of petroleum and petro-chemicals included in the publication shows F.O.B. value of exports whereas similar value figures for imports reflect C.I.F. value of imports.

10. Revision/Updating: Necessary revision/updating in the past data have been made in the light of latest available figures.

11. Abbreviations: Details of abbreviations used have been provided in Appendix.

12. Conversion Factors: The conversion factors generally used in the Oil Sector are also given in the Appendix.

Selected Economic Indicators of the Indian Economy.

Indicator	unit/base	1970-71	1975-76	1980-81	1982-83	1983-84	1984-85(P)
1.	2.	3.	4.	5.	6.	7.	8.
1.Geographical Area	m.Sq.km.	3.27	3.29	3.29	3.29	3.29	3.29
2.Population(mid yr.estimates)							
Total	Million	539	603	675	705	720	736(e)
Rural	"	432	473	519	541	533	566(e)
Urban	"	107	130	156	164	167	170(e)
Birth rate	Per '000'	36.8	35.2	33.7	33.8	33.7	33.6(e)
Death rate	"	15.7	15.9	12.6	11.9	11.9	11.9(e)
3.National Income:							
i) Gross National Product at factor cost							
a)At current prices	Rs.Crores	36452	66375	113907	144882	171201	188459
b)At 1970-71 prices	"	36452	42799	50793	54836	59043	61201
ii)Net National Product at factor cost:							
a)At current prices	Rs.Crores	34235	62302	105804	133457	157830	173207
b)At 1970-71 prices	"	34235	40274	47496	51119	55100	57014
iii)Per capita Net National Product:							
a)At current price	Rupees	632.8	1026.4	1558.2	1882.3	2180.0	2343.8
b)At constant prices	"	632.8	663.5	699.5	721.0	761.0	771.5
iv)Gross Domestic Savings at current prices:	Rs.Crores	6783	14928	29084	37238	42824	47206
v)Gross Domestic Capital Formation:							
At current prices	Rs.Crores	7177	14811	31185	39811	45348	49781
4.Budgetary Transactions of: Central & State/UT Govts.							
i) Total outlay	Rs.Crores	8352	18933	36845	52747	60829	73215
ii)Current revenue	Rs.Crores	6064	14095	24563	35795	40989	47821
iii)Capital receipts (Net)-Total	Rs.Crores	1864	4490	8831	14603	16094	19517
Internal	"	1482	2733	7161	13012	14483	17442
External	"	382	1757	1670	1591	1611	2075
iv)Overall Budgerary Deficit	"	424	348	3451	2349	2135	5877
5.Foreign Exchange Reserves:							
i)Gold	Rs.Crores	182.5	182.5	225.6	225.6	225.6	245.8
ii)SDR	"	148.9	202.8	490.5	270.2	216.4	146.5
iii)Foreign Exchange	"	438.1	1491.7	4822.1	4265.3	5497.9	6816.8
6.Foreign Trade:							
i) Import	Rs.Crores	1634	5265	12549	14307	15763	16485
ii) Export	"	1535	4036	6711	8803	9872	11297
iii) Balance of Trade	"	(-)99	(-)1229	(-)5838	(-)5504	(-)5891	(-)5188
7.Index of Production (Triennium ending)							
i) Agriculture	1969-70=100	111.5	125.1	135.3	137.5	156.4	155.0
ii)Industrial	1970=100	100.0	123.4	154.1	175.9	183.3	193.9

e = estimated.

Selected Economic Indicators of the Indian Economy

Indicator	unit/base	1970-71	1975-76	1980-81	1982-83	1983-84	1984-85(P)
1.	2.	3.	4.	5.	7.	8.	6.
8.Agriculture Production:							
Total Food-grains	Mn.Tons.	108.42	121.03	129.59	129.52	152.37	146.22
of which							
Wheat	"	23.83	28.85	36.31	42.79	45.48	44.23
Rice	"	42.83	48.74	53.63	47.12	60.10	58.64
ii)Oil seeds	"	9.63	10.61	9.37	10.00	12.69	13.10
iii)Sugarcane	"	126.37	140.60	154.25	189.51	174.08	173.57
iv)Cotton	170 Kg.Bale	4.76	5.95	7.01	7.53	6.39	8.46
9. Industrial Production:							
Aluminium	'000'Tonnes	168.5	187.3	199.0	211.5	220.3	276.0
Steel ingets	Mn.Tonnes	6.14	8.27	10.33	11.03	10.48	10.81
Nitrogenous Fertilizers	(N)'000'Tn.	830	1535	2164	3424	3491	3917
Phosphatic Fertilizers	(P205) "	229	320	842	980	1048	1246
Cement	Mn.Tonnes	14.3	17.2	18.6	23.3	26.7	29.5
10.Prices:							
i) Wholesale price index	1970-71=100	100.0	173.0	257.3	288.7	316.0	338.4
ii) Consumer price index for:							
a)Industrial Workers	1960=100	186	313	401	486	547	582
b)Agricultural labourers	1960-61=100	192	317	409	481	522	525
c)Urban Non-manual workers	1960=100	174	277	369	446	492	532
11. Employment:							
i) Organised Sector							
a)Public Sector	Million	10.73	13.32	15.48	16.46	16.87	17.23
b)Private Sector	"	6.74	6.84	7.40	7.52	7.34	7.36
Total	"	17.47	20.16	22.88	23.98	24.21	24.59
ii) No. of persons on life register of empl-oyment exchange	Million	4.07	9.35	16.20	20.12	22.60	23.91
12. Energy Generation (gross):							
Coal	Mn.tonnes	72.95	99.68	114.00	130.50	138.22	147.40
Lignite	"	3.39	3.02	4.80	6.40	6.64	7.11
Natural gas	(Mn.Qty.Mts.)	1445	2368	2358	4936	5961	7241
Crude Oil	Mn.tonnes	6.82	8.45	10.51	21.06	26.02	28.99
Petroleum products	"	18.33	22.06	25.49	32.81	34.82	35.17
Electricity:							
a)Installed Capacity:							
(i) Utilities							
hydel	M.W.	6383	8464	11791	13055	13853	14465
Thermal	"	7906	11013	17563	21446	24389	12880
Nuclear	"	420	640	860	860	1095	1095
Total:	"	14709	20117	30214	35361	39339	42440
(ii) Non utilities	"	1562	2132	3102	3871	4415	4678
(iii)Grand Total:	"	16271	22249	33316	39234	43754	47118
b) Gross Generation:							
(i)Utilities	B.KWH						
Hydel	"	25.25	33.30	46.54	48.37	49.84	53.97
Thermal	"	28.16	43.30	61.30	79.87	86.62	98.93
Nuclear	"	2.42	2.63	3.00	2.02	3.49	4.07
Total	"	55.83	79.23	110.84	130.26	139.95	156.97
(ii) Non-utilities	"	5.38	6.70	8.42	10.04	10.69	12.21
GRAND TOTAL		61.21	85.93	119.26	140.30	150.64	169.18

SOURCE: 1)=RGI's mid year estimates. (P)= Provisional/RBE.
2)=Economic Survey. e = estimated.

PART–I
PETROLEUM STATISTICS

I-HIGHLIGHTS OF INDIAN PETROLEUM INDUSTRY - 1985-86

1. The ONGC continued to intensify its exploration/ development activities in the country during 1985-86 by commissioning 9 more BHEL rigs (4 in Western and 5 in Eastern Region), two Mobile rigs in Western Region and 2 Branham type-III rigs one each in Krishna-Godavari sector and West Bengal. In the offshore areas, the exploration work was increased by ONGC by deploying five Charter-hired/contract rigs. Out of which 4 rigs namely Uxmal, JW Macclean, Sedco-252 and DF-83 started drilling operations in West Coast and the fifth "Griffin Alexander" in the East Coast. Apart from this, 4 new cardwell work over rigs were also commissioned (3 in Eastern Region and one in Western Region) by ONGC during the year.

2. Drilling operation were extended by ONGC to 18 new onland structures (out of which 6 structures were located in Gujarat, one in Assam, 2 in Cauvery Basin in Tamil Nadu, 6 in Krishna Godavari in Andhra Pradesh, one in Bihar and 2 in West Bengal) and 20 new offshore structures (13 in West Coast and 7 in East Coast). Eight new production and 4 process platforms were also commissioned by ONGC in the Bombay Offshore Project during the year.

3. The OIL also stepped up its exploration work in Eastern Region and also extended its activities to Orissa, Rajasthan, North East Coast and Andaman Islands.

4. Acquisition of 3D seismic data was for the first time commenced in the country by ONGC with the help of UNDP Project.

5. The exploration work undertaken by OIL and ONGC led to Oil/Gas discoveries at Tinkhong-Tinali and Rajgarh in Assam, Karjisan and Pakhajan in Gujarat, Narimanam in Cauvery and Narsapur, Kaza and Talipaka in Krishna-Godavari and at B-172, B-174, D-18, R-71 and Panna East structures in Bombay Offshore.

6. Regular crude production from 4 new structures in Gujarat viz.,Dahej, Balol, Wasna and Limbodra was started by ONGC through early production system. Crude was also produced through the same system, for the first time, in Tamil Nadu from Narimanan structure and supplied to Madras Refinery through tankers. Production from Balol was another landmark since this was the first heavy oil field of ONGC in onshore areas.

7. Two LPG plants one each at Uran (Plant-II) and Ankleshwar, effluent disposal plant at Nawagam GGS-III and gas grid at Nawagam GGS-I were commissioned.

8. The oil companies expanded their marketing operation by opening 389 new retail outlets, 122 new Kerosene/LDO dealerships and 514 new LPG dealerships during the year.

9. About 19 lakhs more LPG consumers were enrolled during the year. With this the total number of LPG domestic consumers in the country increased to over 208 lakhs at the end of 1985-86 resulting in saving of valuable foreign exchange through reduced pressure on Kerosene.

10. Keeping in view the rapid growth in the consumption of energy particularly crude oil and gas, the growing share of oil and gas in commercial energy consumption, the need to restrain growth in imports of POL and the need to raise resources for a viable 1986-87 Plan, the Government increased the basic prices of few petroleum products with effect from 1.2.1986 as under:

	Product	Increase/SU
1.	MS (Both Grades)	Rs. 500/KL
2.	ATF(For Domestic Airlines only)	Rs. 500/KL
3.	H.S.D.	Rs. 180/KL
4.	LPG (Domestic)	Rs. 700/MT
5.	SKO	Rs. 225/KL

However with a view to providing relief to the vulnerable sections of the society and to help farming and other communities, Government reduced the prices of MS by Rs.100/KL, HSD by Rs.72/KL, LPG (Domestic) by Rs.280/MT and SKO by Rs.90/KL with effect from mid night of 5th/6th February 1986.

II. CHRONOLOGY OF IMPORTANT EVENTS IN THE HISTORY OF PETROLEUM INDUSTRY IN INDIA FOR 1985-86.

A. EXPLORATION AND PRODUCTION

(i) Oil India Limited

1985-86: Oil was struck in two new structures viz at Tinkhong-Tinali and at Rajgarh, in Assam.

OIL won the Corporate Performance Award 1985 instituted tuted by the Economic Times and Harvard Business School Association of India and was thus adjudged the best amongst 183 Public Sector companies in the country.

OIL received a Petroleum Exploration Licence for 10,900 Sq.Kms. off the coast of the Andaman Islands.

A six-well offshore drilling programme in the North East Coast was commenced by OIL.

OIL completed seismic surveys in the districts of Puri,Balasore and Cuttack and made necessary arrangements for contract drilling in Orissa onshore areas.

Data acquired by OIL from the seismic surveys in the Rajasthan Exploration areas was in advanced stage of processing/interpretation and the survey work was progressing ahead of schedule.

Seismic surveys carried out by OIL in Assam and Arunachal Pradesh over shot the target for 1985-86.

Preliminary plan for development and supply of 2.5 mscmd non-associated natural gas in Assam was drawn by OIL.

OIL earmarked about 1.00 mmscmd of associated natural gas from upper Assam oil fields for power generation through th Central Electricity Authority.

(ii) Oil & Natural Gas Commission

1985: In April, three new structures (2 offshore and one onland) were taken up for drilling, a new BHEL rig was commissioned in Gujarat, eight cardwell workover rigs and snubbing unit at Ahmedabad Project were commissioned.

In May, drilling was commenced at 4 new structures (3 offshore structures in West Coast and the fourth onland structure at Tiruvarur in Tamilnadu), one offshore rig viz. "Uxmal" and the nineth cardwell workover rig were commissioned, process platform NQO in Bombay offshore and Hazira pipeline were commissioned. Gas strike in a new offshore structure was observed and production of oil from a new structure in Western Region was started.

In June, 4 new structures (2 offshore and 2 onland) were taken up for drilling, one new BHEL rig was commissioned in Eastern Region, gas lift operation under gas grid system was started at Kalol and heavy flow of gas was observed at a well in Krishna-Godavari region.

In July, drilling was started at 2 new onland structure (one in Gujarat and the other in Andhra Pradesh in the Krishna- Godavari region), a new BHEL rig was commissioned in Western Region, gas grid at Nawagom and LPG PLant-II at Uran were commissioned. Oil strike was observed at a new onland structure in Cauvery Basin and gas supply of Western Ceramics Pvt. Ltd., from Ankleshwar field was started.

In August, drilling was commenced at a new onland structure in the Eastern Region, a new BHEL rig was commissioned in Eastern Region, a new Mobile rig was deployed in Western Region, HRA Complex was commissioned and processing of crude was started at Heera Platform. Oil and gas flow was also observed during the month in a new structure viz. Panna East (Bombay offshore).

In September, 5 new structures (2 offshore and 3 onland) were taken up for drilling, 2 new rigs (one from BHEL and the other from Mobile) were commissioned in Western Region. Oil was struck at a new structure in Bombay High, regular crude production from a new structure in Gujarat was started through early production system, effluent disposal plant at Nawagom was commissioned and gas supply from Bombay offshore to Kribhco was commenced.

In October, drilling was started at 2 new structures (one offshore and one onland), "JW Macclean" a chartered hired rig commenced drilling operations in Bombay offshore, NW production platform was commissioned in Bombay offshore and gas flow was observed in a new structure in Gujarat.

In November, 3 new structures (2 offshore and one onland) were taken up for drilling, a new BHEL rig was commissioned in Assam, a chartered hired offshore rig "Sedco 252" commenced drilling operations in West coast, SHP process platform was commissioned in Bombay offshore, oil and gas was struck in a new structure in Bombay offshore, regular crude production was started from a new structure in Gujarat through early production system and gas supply from Ankleshwar field to M/s. Pragati Glass Limited was started.

In December, 2 new offshore structures in the East Coast were taken up for drilling, 2 new BHEL rigs were commissioned, a chartered-hired drilling rig started drilling operations in Krishna-Godavari offshore area, tenth card-well workover rig was commissioned, BH production platform was commissioned in Bombay High, oil and gas was struck in a new structure in Gujarat and regular crude production through early production system was started from a new structure in Gujarat.

1986: In January, drilling was started at 3 new structures (2 offshore and one onland), Brahnam Type-III rig was commissioned in Krishna Godavari area, flow of gas was observed in a new structure in Krishna Godavari and 4 production platforms were commissioned.

In February, 4 new structures (one offshore and 3 onland) were taken up for drilling, one Brahnam Type-III rigs and a BHEL rig were commissioned, crude production through early production system was commenced from Narimanan structure in Tamil Nadu and transported to Madras Refinery through Tankers, LPG plant at Ankleshwar and 2 production platforms were commissoned.

In March, drilling was started at 5 new structures (3 offshore and 2 onland), "DF-83" charter-hired offshore rig started drilling operations in Bombay High, oil was struck at a new structure in Bombay offshore, NQG Process Platform and the ninth cardwell workover rig were commissioned. Supply of gas to Tripura State Electricity Board was started.

(iii) Gas Authority of India Limited

1985: In April, decision to invite composite tender bids for entire HBJ Project-except line-pipes was conveyed by Government and a task force for finalisation of composite tender was formed.

In June, tender document was put on sale. Firm contract for supply of 30" linepipes was also signed with M/s.Bergrohr GMBH Herne of West Germany during the same month.

In July firm contracts were signed for supply of 36" pipelines with M/s.Interbras/Petrobras, Brazil and M/s.Japanese Consortium, Japan.

In August a bidders conference was held, a firm contract was signed with M/s.Sider Export for supply of 24" line pipes, firm orders were placed with M/s.Interbras/Petrobras, Brazil and SAIL, India for supply of 18" linepipe. Unpriced bids for composite tender were also opened during this month.

In November, priced bids were opened, recommendations for approval of composite tender were submitted to the Government and firm order for purchase of 18" linepipes was placed on M/s.SAIL, India.

(iv) Hydrocarbon India Limited (HIL)

1985-86: The Company arranged for training of 6 malagache nationals in different institutes of ONGC.

Offers for concultancy jobs including training were submitted by the company to different countries.

A consortium of Public Sector Undertakings viz. "Indian Consortium of Oil & Natural Gas" (ICON), with HIL as the leader of Group, was formed to take up turn-key jobs in the oil sector abroad. Besides, ONGC, the other members included in the consortium were Bridge & Roof, BHEL, BHPV, Bharat Pumps & Compressors, EIL, Instrumentation Limited, Petroleum India International and MDL. The secretarial, marketing and bidding work was also entrusted to HIL.

Pursuent to directives from Government, a draft contract for exploration in offshore Vietnam was submitted by HIL.

HIL was associated with "Third Round Leasing" to foreign Parties.

B. R E F I N I N G

1985: 1. Bharat Petroleum Corporation Limited, Bombay Refinery.

On 3rd April, BPCL's major refinery expansion project was formally inaugurated.

In April, Aromatics plant was mechanically completed.

In July, Aromatics plant was commissioned.

On 31st January, the Aromatics plant and Sulphur recovery unit was formally inaugurated. The Indian Chemical Manufactures Association announced their prestigious award for forward Development of Technology to BPCL for 1985 in recognition of their adoption of indigeneous technology in their Aromatics Project.

2. Hindustan Petroleum Corporation Ltd.,

(i) Bombay Refinery:

1985: On 6th June, two million tonnes expansion facilities were commissioned. The Sulphur Recovery Unit was also commissioned on the same date.

In October, two high efficient crude furnaces were installed as a part of energy conservation programme,were commissioned.

The refinery completed 12.4 million man hours without lost time accident during 1985-86, establishing a new safety record for petroleum refining industry in India.

(ii) Vizakh Refinery:

1985: On 30th January, three million tonnes expansion facilities to process low Sulphur BH crude were fully commissioned.

The refinery completed 5 million man hours of working during 1985-86 without a lost time accident.

3. Indian Oil Corporation Ltd., (Refinery & Pipelines Divn.)

(a) Barauni Refinery, Barauni, Bihar.

Additional Refining facilities were installed and commissioned during the year.

(b) Gujarat Refinery, Koyali, Gujarat.

1985: In April, 5 new high efficiency furnaces were commissioned.

In August, 5 more new high efficiency furnaces were commissioned.

In December, a meeting was held to examine the feasibility report on setting up of Additional Refining Facilities at Gujarat Refinery. It was recommended that the proposal may be submitted to PIB.

(c) Haldia Refinery, Haldia, West Bengal.

1986: In March, slack wax despatches were started for the first time.

(d) Karnal Refinery Project.

1985: In September, it was decided to explore the possibility of implementaling the Karnal Refinery Project as a joint venture with suitable private parties in India or abroad.

4. Cochin Refineries Limited, Cochin.

1985: In June, the Fluid Catalytic Cracking Unit (FCCU) was commissioned.

1986: On 20th February, the Refinery completed fifth one million man hours without a loss time accident.

On 27th February, a fire occured in the Naphtha Caustic wash facilities and LPG recovery system of the primary manufacturing unit.

5. Bongaigaon Refinery and Petro-Chemicals Limited,Asssam.

1985: In July,Xylene and DMT plants went into commercial production.

C. M A R K E T I N G

1. Bharat Petroleum Corporation Limited

(Marketing Activities)

1985: On 12th April, BPCL was awarded a plaque and merit certificate for the distinguished services in consumer education compaign on LPG safety at the Sixth Annual Conference of All India LPG Distributors Federation (South Region) held at Madras.

In August, commercial marketing of Benzene and Toluene from BPCL's Aromatics Plant was commenced.

On 28th October, BPCL's new international terminal complex hydrant fueling facilities at Palam Airport were formally inaugurated.

2. Hindustan Petroleum Corporation Limited
(Marketing Division)

1985-86: On Ist February 1986, 14" diameter 160 Km long Bombay-Pune product pipeline was commissioned.

The company commissioned 92 new Retail Outlets and 28 new SKO/LDO dealerships and released 5.29 lakhs new domestic LPG connections during the year.

The Company set up 52 field laboratories during the year for effective quality control of products at various locations in the country.

Marketing of new high efficiency diesel engine lubricant Hylube Milcyl was commenced during the year. A new lithium based Multipurpose Grease which will contribute to considerable reduction in fuel consumption of automotive vehicles and HP Rail Road Oil 613 for railway diesel locomotives were also introduced during the year.

3. Indian Oil Corporation Limited
(Marketing Division)

1985: In April, a mobile laboratory to text petroleum products samples was introduced on trial basis at Bombay.

In May, synthetic type oil "Servosynco 270" for use in high capacity ethylene compressors was introduced which would replace imported Orites 270 DS.

In June, for the first time import of highly specialised lubricating oil additives in bulk was commenced.

In July, two products under the category of Rubber Oils (Aromatic type) under the brand names "IOC Process Oil Heavy" and "IOC Process OIL Extra Heavy" were introduced for rubber process industry.

In August, superior quality high viscosity index Servohydrex 46 for use in excavators was manufactured in collaboration with Hitachi, Japan, indigenously manufactured new self closing LPG cylinder valves conforming to Kosan Technova (Denmark) design and technology and new look Dispensing Pumps with electric registers were introduced.

In October, LPG Bottling Plant was commissioned at Rajkot.

In December, Servo Steel EP ICO an extreme pressure type oil film bearing oil was developed for use in No Twist Rod Mills as substitute for imported Mobile Vacuouline 525.

1986: In February, a mini LPG Bottling Plant was commissioned at Durgapur and Pilfer Proof PVC sealings, replacing the paper seals for LPG cylinders, was introduced.

In March, a mini LPG Bottling Plant was commissioned at Kanpur, Phase-II of Hydrant Refueling System at Sahar International airport in Bombay was commissioned and high performance shock absorber oil under the brand name "Servo Shocarm" meeting the "Armstrong UK " specifications was introduced.

4. Indian Oil Corporation Limited

(Assam Oil Division, Digboi)

1985: June, a new 200 mm nominal bore product pipeline from Digboi to Tinsakia was commissioned replacing the old 150 mm nominal bore pipeline.

5. IBP Co. Limited

1985-86: The IBP Co. Limited commissioned 49 new Retail outlets and converted 17 Utility Outlets into regular outlets during the year.

D. L U B E P L A N T S

(I) Lubrizol India Limited

1985: In March, the installed capacity of Engine Oil Detergent Unit was increased from 6,700 MTPA to 10,000 MTPA and letter of intent for manufacture of 2,000 MTPA of Sulfonic Acid was received.

In July, letters of intent for increase in capacity of Engine Oil Dispersant from 9,000 MTPA to 12,000 MTPA and that of Engine Oil Detergent from 11,200 MTPA to 13,500 MTPA were received.

On 25th October, the Engine Testing Laboratory constructed at the cost of Rs.4.23 crores was inaugurated.

1986: In March, letter of intent for manufacture of 3,000 MTPA of Viscosity Index Improver/Pour Point Depressant was received.

(ii) Indian Oil Blending Limited

(A subsidy of 100)

1985: On 31st December, new lot of about 10 acres of land was acquired by the company at Thane from the Maharashtra Industral Development Corporation for relocation of its Grease Plant.

III. INDIA'S PETROLEUM INDUSTRY AT-A-GLANCE (1970-71 - 1985-86)

Year	Crude Oil balance recoverable reserves	Consumption (excl-RBF)	Crude oil production	Gross Imports		Refinery throughput	Refinery production	Value of POL gross imports	India's total exports	% of POL imports to India's exports	CIF Unit value of crude imports	Central excise & Customs duties on POL
				Crude oil	POL Products							
	(.....Million Tonnes.....)							(.Rs./Crores)			(Rs/MT)	(Rs/Crores)
1	2	3	4	5	6	7	8	9	10	11	12	13
1970-71	128	17.91	6.82	11.68	1.09	18.38	17.11	137	1535	8.9%	91	638
1971-72	114	20.07	7.30	12.95	2.15	20.04	18.64	194	1608	12.1%	114	772
1972-73	125	21.72	7.32	12.08	3.53	19.33	17.83	207	1971	10.5%	121	853
1973-74	127	22.35	7.19	13.87	3.55	20.96	19.50	541	2523	21.4%	300	970
1974-75	125	22.11	7.68	14.02	2.65	21.09	19.60	1112	3329	33.4%	654	1106
1975-76	144	22.45	8.45	13.62	2.22	22.28	20.83	1256	4036	31.1%	772	1155
1976-77	275	24.10	8.90	14.05	2.62	23.00	21.43	1424	5142	27.7%	837	1222
1977-78	303	25.54	10.76	14.51	2.88	24.90	23.22	1552	5408	28.7%	859	1279
1978-79	347	28.24	11.63	14.66	3.88	25.97	24.20	1681	5726	29.4%	854	1480
1979-80	354	29.88	11.77	16.12	4.72	27.47	25.79	3270	6418	51.0%	1357	1620
1980-81	366	30.90	10.51	16.25	7.29	25.84	24.12	5266	6711	78.5%	2061	1512
1981-82	468	32.52	16.19	15.30	4.88	30.14	28.18	5189	7806	66.5%	2442	1582
1982-83	471	34.66	21.06	16.95	5.03	33.16	31.07	5598	7703	63.6%	2386	1664
1983-84	527	35.84	26.02	15.97	4.33	35.26	32.93	4812	9872	48.7%	2218	1649
1984-85	511	38.80	28.99	13.64	6.09	35.56	33.24	5345	11657	45.9%	2515	2077
1985-86(P)	500	40.39	30.17	15.14	3.87	42.91	39.88	4960	10420	47.6	2435	2934

(P) = Provisional/RBE

IV. GROWTH OF PETROLEUM INDUSTRY IN INDIA

(000 Tonnes)

Year	Crude Oil		Petroleum Products	
	Production	Refineries Crude Throughout	Production	Consumption*
1	2	3	4	5
1960	451	6091	5747	7964
1965	3022	9754	9113	12356
1970	6809	18459	17172	18816
1971	7185	19588	18225	20706
1972	7373	19672	18198	22675
1973	7198	20518	19089	23726
1974	7490	20783	19241	23023
1975	8283	21835	20368	23541
1976	8659	22762	21188	24897
1977	10185	24430	22795	26570
1978	11271	25626	23877	28894
1979	12839	28153	26360	31306
1980	9399	25075	23597	31633
1981	14925	29528	27575	34037
1982	19734	32107	29984	35403
1983	25148	34534	32298	37223
1984	27933	35235	32963	39934
1985(P)	29860	41226	38264	42508

Rs/Crores

Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS (col 8-11)
	Crude Oil	Products	Total	Crude Oil	Products	Total	
(1)	6	7	8	9	10	11	12
1960	40.57	41.02	81.59	--	4.61	4.61	76.98
1965	40.38	44.73	85.11	--	3.92	3.92	81.19
1970	102.36	30.53	132.89	--	5.72	5.72	127.17
1971	139.88	43.49	183.37	--	2.55	2.55	180.82
1972	144.25	56.69	200.94	--	8.94	8.94	192.00
1973	244.56	88.03	332.59	0.42	5.35	5.77	326.82
1974	899.36	209.90	1109.26	--	19.37	19.37	1089.89
1975	992.02	199.46	1191.48	--	13.83	13.83	1177.65
1976	1145.56	219.70	1365.26	--	7.60	7.60	1357.66
1977	1258.92	272.99	1531.91	--	6.50	6.50	1525.41
1978	1243.89	414.13	1658.02	--	4.20	4.20	1653.82
1979	1787.38	727.56	2514.94	--	14.94	14.94	2500.00
1980	3038.66	1788.28	4826.94	--	17.98	17.98	4808.96
1981	3793.83	1638.58	5432.41	--	15.13	15.13	5417.28
1982	4116.89	1551.37	5668.26	1044.71	101.23	1145.94	4522.32
1983	3471.47	1246.60	4718.07	1041.87	286.64	1328.51	3389.56
1984	3525.15	1850.31	5375.46	1598.55	271.63	1870.18	3505.28
1985(P)	3808.74	1440.70	5249.44	503.88	482.06	985.94	4263.50

(P) = Provisional.

* = Including Refinery Fuel.

GROWTH OF PETROLEUM INDUSTRY IN INDIA

(000 Tonnes)

Financial Year	Crude Oil		Petroleum Products	
	Production	Refineries Crude Throughout	Production	Consumption*
1	2	3	4	5
1960-61	448(e)	6130	5777	8285
1965-66	3473	10233	9561	12437
1970-71	6822	18379	17110	19135
1971-72	7299	20042	18639	21299
1972-73	7321	19328	17830	22978
1973-74	7189	20958	19495	23574
1974-75	7684	21094	19603	23302
1975-76	8448	22283	20829	23673
1976-77	8898	22995	21432	25400
1977-78	10763	24898	23219	26990
1978-79	11633	25974	24193	29719
1979-80	11766	27474	25794	31323
1980-81	10507	25836	24123	32261
1981-82	16194	30146	28182	34107
1982-83	21063	33156	31073	36395
1983-84	26020	35263	32926	37776
1984-85	28990	35556	33236	40828
1985-86	30168	42910	39881	42819

(Rs./Crores)

Financial Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS
	Crude Oil	Products	Total	Crude Oil	Products	Total	
(1)	6	7	8	9	10	11	12
1960-61	39.23	39.84	79.07	--	4.40(e)	4.40 (e)	74.67
1965-66	39.62	40.68	80.30	--	4.39	4.39	75.91
1970-71	106.72	29.91	136.63	--	4.67	4.67	131.96
1971-72	147.02	46.98	193.90	--	3.91	3.91	189.99
1972-73	146.37	60.58	206.95	--	8.16	8.16	198.79
1973-74	416.39	124.50	540.89	0.42	8.05	8.47	532.42
1974-75	916.99	195.00	1111.99	--	17.46	17.46	1094.53
1975-76	1051.76	204.34	1256.10	--	13.96	13.96	1242.14
1976-77	1175.91	248.23	1424.14	--	6.89	6.89	1417.25
1977-78	1246.20	305.34	1551.54	--	5.69	5.69	1545.85
1978-79	1251.17	429.99	1681.16	--	4.11	4.11	1677.05
1979-80	2187.53	1082.39	3269.92	--	24.02	24.02	3245.90
1980-81	3348.97	1917.52	5266.49	--	8.41	8.41	5258.08
1981-82	3706.38	1453.16	5189.54	196.23	15.13	211.36	4978.18
1982-83	4043.74	1553.94	5597.68	1063.37	133.79	1197.16	4400.52
1983-84	3541.05	1270.75	4811.80	1231.10	356.96	1588.06	3223.74
1984-85	3430.34	1914.91	5345.25	1563.16	255.03	1818.19	3527.06
1985-86	3686.80	1273.60	4960.40	135.15	509.57	644.72	4315.68

* = including Refinery Fuel (P) = Provisional. (e) = Estimated.

V PETROLEUM ENERGY

PETROLEUM ENERGY IN INDIA 1980-1985.

(Calendar Years)

AVAILABILITY

PRODUCTS	1980	1981	1982	1983	1984	1985 (P)
1.	2.	3.	4.	5.	6.	7.
	IN ORIGINAL UNITS @ (MILLION TONES)					
Kerosene	4.28	4.86	5.19	5.25	5.96	6.27
ATF	1.07	1.06	1.31	1.37	1.42	1.56
HSD	10.15	11.18	11.77	12.32	13.42	14.99
LDO	1.24	1.07	1.11	1.09	1.21	1.15
Fuel Oils	7.19	7.47	7.21	7.57	7.78	8.01
Others*	3.21	3.63	3.97	4.42	4.88	5.74
Total	27.14	29.27	30.56	32.02	34.67	37.72
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	8.56	9.72	10.38	10.50	11.92	12.54
ATF	2.14	2.12	2.62	2.74	2.84	3.12
HSD	20.30	22.36	23.54	24.64	26.84	29.98
LDO	2.48	2.14	2.22	2.18	2.42	2.30
Fuel Oils	14.38	14.94	14.42	15.14	15.56	16.02
Others*	6.42	7.26	7.94	8.84	9.76	11.48
Total	54.28	58.54	61.12	64.04	69.34	75.44
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	34.24	38.88	41.52	42.00	47.69	50.13
ATF	8.03	7.95	9.83	10.28	10.62	11.69
HSD	91.35	100.62	105.93	110.88	120.74	134.93
LDO	11.16	9.63	9.99	9.81	10.91	10.34
Fuel Oils	14.38	14.94	14.42	15.14	15.55	16.01
Others*	17.09	19.23	21.09	23.39	26.61	30.99
Total	176.25	191.25	202.78	211.50	232.12	254.09

CONSUMPTION (#)

PRODUCTS	1980	1981	1982	1983	1984	1985 (P)
1.	2.	3.	4.	5.	6.	7.
	IN ORIGINAL UNITS (MILLION TONES)					
Kerosene	4.09	4.59	5.13	5.39	5.84	6.13
ATF	1.14	1.12	1.13	1.19	1.30	1.42
HSD	10.16	10.75	11.64	12.46	13.31	14.58
LDO	1.19	1.02	1.05	1.10	1.18	1.12
Fuel Oils	7.35	7.37	7.13	7.53	7.79	7.85
Others*	3.28	3.61	3.84	4.43	4.93	5.72
Total	27.21	28.46	29.92	32.10	34.35	36.82
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	8.18	9.18	10.26	10.78	11.68	12.26
ATF	2.28	2.24	2.26	2.38	2.60	2.84
HSD	20.32	21.50	23.28	24.92	26.62	29.16
LDO	2.38	2.04	2.10	2.20	2.36	2.24
Fuel Oils	14.70	14.74	14.26	15.06	15.58	15.70
Others*	6.56	7.22	7.68	8.86	9.86	11.54
Total	54.18	56.92	59.84	64.20	68.70	73.74
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	32.72	36.72	41.04	43.12	46.72	49.04
ATF	8.55	8.40	8.48	8.93	9.75	10.65
HSD	91.44	96.75	104.76	112.14	119.79	131.22
LDO	10.71	9.18	9.45	9.90	10.62	10.08
Fuel Oils	14.70	14.74	14.26	15.06	15.58	15.70
Others*	17.44	18.60	20.44	23.25	26.38	30.77
Total	175.56	184.39	198.43	212.40	228.84	247.46

(P)= Provisional. *Includes LPG, Gasolines, Refinery Gas and Refinery Fuel.

@Based on conversion factors adopted by FPC, 1974.

(#) Includes Petroleum Products used for power generation.

PETROLEUM ENERGY IN INDIA: 1980-1981. TO 1985-86.

(Financial Years)

A V A I L A B I L I T Y

PRODUCTS	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86(P)
1.	2.	3.	4.	5.	6.	7.
		IN ORIGINAL UNITS (MILLION TONNES)				
Kerosene	4.46	4.88	5.27	5.52	5.93	6.55
ATF	1.03	1.12	1.38	1.35	1.41	1.65
HSD	10.59	10.88	12.34	12.62	13.59	15.45
LDO	1.18	1.03	1.12	1.12	1.25	1.17
Fuel Oils	7.46	7.43	7.29	7.57	7.89	7.96
Others*	3.28	3.68	4.13	4.53	5.15	6.00
Total	28.00	29.02	31.53	32.71	35.22	38.78
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	8.92	9.76	10.54	11.04	11.86	13.10
ATF	2.06	2.24	2.76	2.70	2.82	3.30
HSD	21.18	21.76	24.68	25.24	27.18	30.40
LDO	2.36	2.06	2.24	2.24	2.50	2.34
Fuel Oils	14.92	14.86	14.58	15.14	15.78	15.92
Others*	6.56	7.36	8.26	9.06	10.30	12.00
Total	56.00	58.04	63.06	65.42	70.44	77.56
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	35.68	39.04	42.16	44.16	47.44	52.40
ATF	7.73	8.40	10.35	10.13	10.58	12.38
HSD	95.31	97.92	111.06	113.58	122.31	139.05
LDO	10.62	9.27	10.08	10.08	11.25	10.53
Fuel Oils	14.92	14.86	14.58	15.14	15.78	15.92
Others*	17.54	19.38	21.99	24.24	27.95	32.22
Total	181.80	188.87	210.22	217.33	235.31	262.50

C O N S U M P T I O N (#)

PRODUCTS	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86(P)
1.	2.	3.	4.	5.	6.	7.
		IN ORIGINAL UNITS (MILLION TONNES)				
Kerosene	4.23	4.69	5.21	5.52	5.96	6.20
ATF	1.13	1.13	1.15	1.21	1.34	1.44
HSD	10.35	10.83	12.01	12.60	13.70	14.74
LDO	1.12	1.04	1.07	1.10	1.20	1.10
Fuel Oils	7.47	7.18	7.30	7.56	7.94	7.71
Others*	3.31	3.70	4.08	4.59	5.07	5.99
Total	27.61	28.57	30.82	32.58	35.21	37.18
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	8.46	9.38	10.42	11.04	11.92	12.40
ATF	2.26	2.26	2.30	2.42	2.68	2.88
HSD	20.70	21.66	24.02	25.20	27.40	29.48
LDO	2.24	2.08	2.14	2.20	2.40	2.20
Fuel Oils	14.94	14.36	14.60	15.12	15.88	15.42
Others*	6.62	7.40	8.16	9.18	10.14	11.98
Total	55.22	57.14	61.64	65.16	70.42	74.36
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	33.84	37.52	41.68	44.16	47.67	49.60
ATF	8.48	8.48	8.63	9.08	10.02	10.80
HSD	93.15	97.47	108.09	113.40	123.26	132.64
LDO	10.08	9.36	9.63	9.90	10.78	9.88
Fuel Oils	14.94	14.36	14.60	15.12	15.88	15.42
Others*	17.35	19.04	21.61	24.13	27.82	32.23
Total	177.84	186.23	203.24	215.79	234.93	250.57

(P)= Provisional. *Includes LPG, Gasolines, Refinery Gas and Refinery Fuel.
@Based on conversion factors adopted by FPC, 1974.
(#) Includes Petroleum Products used for power generation.

VI. EXPLORATION

AREA WISE DEPLOYMENT OF DEEP DRILLING RIGS, WELLS & METREAGE DRILLED BY ONGC & OIL FROM 1970-71 TO 1985-86.

YEAR	ONSHORE			OFFSHORE			TOTAL		
	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			(A.) OIL & NATURAL GAS COMMISSION:						
1970-71	55	89	168	--	--	1	55	89	168
1975-76	56	106	229	4	15	28	60	121	257
1976-77	59	99	206	5	24	59	64	123	265
1977-78	65	87	175	3	35	67	68	122	242
1978-79	65	67	159	4	16	43	69	83	202
1979-80	69	69	138	5	28	59	74	97	197
1980-81	74	72	134	7	32	78	81	104	212
1981-82	76	98	211	7	46	111	83	144	322
1982-83	77	114	224	14	64	162	91	178	386
1983-84	77	117	259	15	88	209	92	205	468
1984-85	86	127	280	14	73	161	100	200	441
1985-86*	83	190	410	18	77	180	101	267	590
			(B.) OIL INDIA LIMITED:						
1970-71	4	12	48	--	--	--	4	12	48
1975-76	3	11	36	--	--	--	3	11	36
1976-77	4	8	33	--	--	--	4	8	33
1977-78	4	19	73	--	--	--	4	19	73
1978-79	4	17	62	--	--	--	4	17	62
1979-80	4	13	48	1	--	2	5	13	50
1980-81	4	9	33	1	1	4	5	10	37
1981-82	5	17	64	--	--	--	5	17	64
1982-83	5	14	60	--	--	--	5	14	60
1983-84	5	23	79	1	3	10	6	26	88
1984-85	7	25	86	1	2	10	8	27	96
1985-86*	8	28	110	1	--	9	9	28	119
			TOTAL (A+B):						
1970-71	59	101	216	--	--	1	59	101	216
1975-76	59	117	265	4	15	28	63	132	293
1976-77	63	107	239	5	24	59	68	131	298
1977-78	69	106	248	3	35	67	72	141	315
1978-79	69	84	221	4	16	43	74	100	264
1979-80	73	92	186	6	28	61	79	110	247
1980-81	78	81	167	8	33	82	85	114	249
1981-82	81	115	275	7	46	111	88	161	386
1982-83	82	128	284	14	64	162	96	192	446
1983-84	82	140	338	16	91	219	98	231	556
1984-85	93	152	366	15	75	171	108	227	537
1985-86*	91	218	520	19	77	189	110	295	709

* Provisional.

EXPLORATORY & DEVELOPMENT DRILLING DONE BY ONGC & OIL.

YEAR	Exploratory		Development		TOTAL.	
	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			(A)ON SHORE:			
1970-71	51+1P	106	50+3P	112	101+3P	218
1975-76	49+1P	120	68+1P	145	117+2P	265
1976-77	49+1P	116	58+1P	133	107+2P	249
1977-78	47+2P	113	59+1P	135	106+3P	248
1978-79	38+1P	96	46	126	84+1P	222
1979-80	43+2P	98	39+2P	80	82+4P	178
1980-81	44+1P	96	38+2P	71	82+3P	167
1981-82	52+2P	130	63+4P	145	115+6P	275
1982-83	57+3P	128	71+4P	156	128+7P	284
1983-84	61+3P	157	79+2P	181	140+5P	338
1984-85	70+5P	186	82+1P	180	152+6P	366
1985-86*	90+4P	237	128+7P	283	218+11P	520
			(B)OFFSHORE:			
1970-71	-----	1	-----	----	-----	1
1975-76	10	19	5	9	15	28
1976-77	17	35	7	14	24	49
1977-78	20	39	15	28	35	67
1978-79	16	43	-----	----	16	43
1979-80	15+1P	40	13	29	28+1P	69
1980-81	15+1P	40	18	42	33+1P	82
1981-82	12	39	34	72	46	111
1982-83	17	57	47	105	64	162
1983-84	22+1P	70	68	149	90+1P	219
1984-85	20+1P	62	51	109	71+1P	171
1985-86*	33+2P	100	44	89	77+2P	189
			TOTAL (A+B):			
1970-71	52+1P	107	50+3P	112	101+3P	218
1975-76	59+1P	139	73+1P	154	132+2P	293
1976-77	66+1P	151	65+1P	147	131+2P	298
1977-78	67+2P	152	74+1P	163	141+3P	315
1978-79	54+1P	139	46	126	100+2P	265
1979-80	58+3P	138	52+2P	109	110+5P	247
1980-81	59+2P	136	56+2P	113	115+4P	249
1981-82	64+2P	169	97+4P	217	161+6P	386
1982-83	74+3P	185	118+4P	261	192+7P	446
1983-84	83+4P	227	147+2P	330	230	557
1984-85	90+6P	248	133+1P	289	223+7P	537
1985-86*	123+6P	337	172+7P	372	295+13	709

(P)=Partly Drilled. * Provisional

STATUS OF WELLS (AS ON IST APRIL OF EACH YEAR)

(NUMBERS)

Company/ Year	OIL	GAS	DRY	UNDER TEST	INJEC-CTION	OTHERS	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			A. Assam Oil Company*				
1970	380	19	-	-	10	588	997
1975	377	7	-	-	5	612	1001
1976	380	6	-	-	5	610	1001
1977	404	8	-	-	6	583	1001
1978	415	10	-	-	6	570	1001
1979	416	10	-	-	6	569	1001
1980	417	10	-	-	6	568	1001
1981	418	9	-	-	6	568	1001
1982	418	9	-	-	6	568	1001
1983	441	-	305	16	4	235	1001
1984	440	5	305	20	5	226	1001
1985	431	4	305	7	7	247	1001
1986	399	2	305	7	6	282	1001
			B. Oil India Limited				
1970	216	12	29	24	7	-	288
1975	250	18	34	27	20	-	349
1976	251	20	34	32	25	-	362
1977	250	21	36	37	26	-	370
1978	264	21	37	40	27	-	389
1979	266	23	39	47	31	-	406
1980	273	26	40	48	34	-	421
1981	283	27	42	48	35	-	435
1982	291	34	42	20	37	30	454
1983	295	36	43	26	43	28	471
1984	307	38	45	32	46	34	502
1985	321	42	49	35	50	31	528
1986	327	37	52	12	53	81	562
		C.	OIL & Natural Gas Commission				
1970	442	63	191	76	20	-	792
1975	605	79	320	141	28	-	1173
1976	695	85	334	152	29	-	1295
1977	763	91	378	158	29	-	1419
1978	844	101	422	140	29	-	1536
1979	886	111	461	135	30	-	1623
1980	951	123	487	125	32	-	1718
1981	1008	133	508	137	38	-	1824
1982	1116	140	530	139	41	-	1966
1983	1219	154	551	178	42	-	2144
1984	1322	166	590	218	53	-	2349
1985	1434	170	657	216	67	-	2546
1986	1642	190	740	164	80	-	2816
			TOTAL (A+B+C)				
1970	1033	94	220	100	37	588	2077
1975	1282	104	354	168	53	612	2523
1976	1326	111	368	184	59	610	2658
1977	1417	120	414	195	61	583	2790
1978	1523	132	459	180	62	570	2926
1979	1568	144	500	182	67	569	3030
1980	1641	159	527	173	72	568	3140
1981	1709	169	550	185	79	568	3260
1982	1825	183	572	159	84	598	3421
1983	1955	190	899	220	89	263	3616
1984	2069	209	940	270	104	260	3852
1985	2186	216	1011	258	124	278	4073
1986	2368	229	1097	183	139	363	4379

* The exploration activities of Assam Oil Company were vested in Oil India Limited w.e.f. 14th October, 1981.

State-Wise Achievements of Geological Field parties Since inception upto March, 1986.

(Provisional.)

STATE	GEOLOGICAL SURVEYS						
	Detailed mapping (Sqm.)	Semi-detailed mapping (Sqm.)	Traversing line (kms.)	Reconnaissance (Sqm.)	Special Studies (Sqm.)	Geoneotectonic studies (Sqm.)	Reconatory Traversing (Sqm.)
1.	2.	3.	4.	5.	6.	7.	8.
1. Andhra Pradesh (including Tamil Nadu, Kerala, Karnataka & Pondicherry)	3879	20089	1698	26904	-	388825 (CH) 13300 (GC) 11345	3300
2. Assam (include Meghalaya, Nagaland, Mizoram, Tripura & Arunachal Pradesh & Nefa)	8005	32844	11310	4979	- (CW)	- 740 Photo Geological mapping (Sqm.Km.)	817 +1100
3. Gujarat/Maharashtra, Madhya Pradesh	8258	47721	2864	13348	2926	-	-
4. Bihar	-	2512	93	-	-	-	-
5. Himachal Pradesh & Punjab	9710	10909	4915	4568	1489	-	330 (RM)+200
6. Jammu & Kashmir	1764	10787	1923	6548	70	CH 372	-
7. Uttar Pradesh	4658	11681	2087	913	4170	-	-
8. Rajasthan	3584	25885	1734	17890	-	-	-
9. West Bengal	912	4830	566	2365	-	5400	-
10. Nepal	194	8446	1087	-	-	-	-
11. Bhutan	-	1821	95	270	-	-	-
12. Andaman & Nicobar	608	3100	619	2281	-	-	-
TOTAL :	41572	180625	28991	80066	8655	394225 (CH) + 13672 (GC) + 11345 (CW) + 740	4447 +200 +1100

Abbreviations : RM - Road Mapping (Sqm.) CW - Compilation Work (Sqm.)
CH - Checking lines. GC - Group Checking.
In case of Oil India Ltd., no geological surveys were undertaken.

STATE-WISE ACHIEVEMENT OF GEOPHYSICAL FIELD PARTIES OF ÖNGC AND OIL SINCE INCEPTION UPTO MARCH 1986.

(Provisional)

STATE	DEPARTMENTAL		CONTRACT	
	Line Kms.	SLK	Line Kms.	SLK
1.	2.	3.	4.	5.
1. Andhra Pradesh	7160	7812	1184	--
2. Assam (including Tripura Mizoram, Arunachal Pradesh & Meghalaya)	20021 (2978)	8355	138	2708
3. Gujarat	44307	21204	2297	--
4. Bihar	2476	1010	--	--
5. Himachal Pradesh & Punjab	5400	367	--	549
6. Madras/Tamil Nadu	9575	7652	868	--
7. Jammu & Kashmir	1937	--	99	--
8. Orissa	1631	--	--	3814
9. Uttar Pradesh	12190	3410	--	--
10. Rajasthan	3554	3134	4105	5574
11. West Bengal	15730	7393	1140	--
TOTAL ONSHORE	123931	60337	9831	12645
OFFSHORE	125323*	--	119839	4451
TOTAL	249254	60337	129670	17096

SLK: Standard Line Kilometres.

* This does not include 13104 LK of Gravity Survey Data, included earlier.

STATE-WISE ACHIEVEMENT OF DRILLING OF ONGC AND OIL SINCE INCEPTION UPTO MARCH:1986.

STATE	DRILLING (000 METRES)			
	Departmental		Contract	
	Wells	Metreage	Wells	Metreage
1.	2.	3.	4.	5.
A. ONLAND:				
1. Andhra Pradesh (including Kerala)	15	58.6	--	--
2. Assam, Andaman & Nicobar (including Tripura, Mizoram, Arunachal Pradesh Meghalaya, West Bengal and Nagaland)	1119+6P	3693.4	--	--
3. Gujarat (including Kutch Maharashtra and Madhya Pradesh)	1671	2737.5	--	--
4. Bihar	2	8.2	1	4.9
5. Himachal Pradesh (including Punjab)	8	23.6	2	9.5
6. Tamil Nadu & Pondichery	23	53.0	--	--
7. Jammu & Kashmir	3	6.6	--	--
8. Orissa	--	--	--	--
9. Uttar Pradesh	3	8.6	1	5.3
10. Rajasthan	13	24.8	6	11.4
Total ONLAND	2857+6P	6614.3	10	31.1
B. OFFSHORE:				
1. West Coast	451	1000.2	--	--
2. East Coast	52	166.1	8+1P	34.8
Total Offshore	503	1166.3	8+1P	34.8
TOTAL (A+B)	3360+6P	7780.6	18+1P	65.9

NOTE:- (P)=Partly Drilled.

VII. C R U D E O I L

State wise Reserves of Crude Oil @

(MMT)

Y E A R	ON SHORE			Total	OFF SHORE	Grand Total
	Gujarat	Assam	Rajasthan		Bomaby High	
1	2	3	4	5	6	7
1966	62.73	90.27	-	153.00	-	153.00
1967	65.88	88.96	-	154.84	-	154.84
1968	64.92	76.08	-	141.00	-	141.00
1969	59.80	72.51	-	132.31	-	132.31
1970	56.38	71.46	-	127.84	-	127.84
1971	51.08	62.70	-	113.78	-	113.78
1972	52.28	72.90	-	125.18	-	125.18
1973	49.45	77.87	-	127.32	-	127.32
1974	48.45	76.05	-	124.50	-	124.50
1975	45.72	84.41	-	130.13	13.77	143.90
1976	45.79	81.99	-	127.78	147.68	275.46
1977	45.62	82.28	-	127.90	175.28	303.18
1978	47.49	78.50	-	125.99	221.04	347.03
1979	45.34	82.81*	-	128.15	226.29	354.44
1980	52.73	82.65*	-	135.38	230.95	366.33
1981	51.48	89.00*	-	140.48	328.29	468.77
1982	53.18	91.52*	-	144.70	325.18	469.88
1983	90.58	97.03*	-	187.61	338.70	526.31
1984	88.00	99.01*	-	187.01	323.81	510.82
1985	86.61	101.80*	-	188.41	311.10	499.51
1986	98.64	113.83*	-	212.47	345.54	558.0

@ Proved & Indicated Balance Recoverable Reserves.
* Includes crude oil reserves in Nagaland.

Note : For AOC & OIL the figures relate to 1st January of each year but in case of ONGC the date pertains to 1st October upto the year 1974 and thereafter to 1st January of each year.

COMPANY-WISE PRODUCTION OF CRUDE OIL IN INDIA
(CALENDAR YEARS)

('000' Tonnes)

YEAR	ON-SHORE				OFFSHORE	GRAND TOTAL	CUMULATIVE PRODUCTION
	AOC	OIL	ONGC	TOTAL	ONGC		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Upto 1947	5826	-	-	5826	-	5826	5826
1948	255	-	-	255	-	255	6081
1949	258	-	-	258	-	258	6339
1950	259	-	-	259	-	259	6598
1951	269	-	-	269	-	269	6867
1952	263	-	-	263	-	263	7130
1953	269	3	-	272	-	272	7402
1954	278	30	-	308	-	308	7710
1955	272	75	-	347	-	347	8057
1956	307	89	-	396	-	396	8453
1957	277	163	-	440	-	440	8893
1958	214	226	-	440	-	440	9333
1959	202	248	-	450	-	450	9783
1960	179	272	-	451	-	451	10234
1961	184	319	10	513	-	513	10747
1962	188	556	334	1078	-	1078	11825
1963	184	805	663	1652	-	1652	13477
1964	170	1274	768	2212	-	2212	15689
1965	158	1742	1122	3022	-	3022	18711
1966	149	2143	2355	4647	-	4647	23358
1967	134	2752	2781	5667	-	5667	29025
1968	117	2771	2965	5853	-	5853	34878
1969	112	3074	3537	6723	-	6723	41601
1970	107	3070	3632	6809	-	6809	48410
1971	98	3146	3941	7185	-	7185	55595
1972	93	3183	4097	7373	-	7373	62968
1973	84	3102	4012	7198	-	7198	70166
1974	72	3080	4338	7490	-	7490	77656
1975	68	3087	5128	8283	-	8283	85939
1976	63	3092	5276	8431	228	8659	94598
1977	58	3120	5569	8747	1438	10185	104783
1978	55	2697	5551	8303	2968	11271	116054
1979	47	2848	5537	8432	4407	12839	128893
1980	41	796	4033	4870	4529	9399	138292
1981(a)	33	2803	5083	7919	7006	14925	153127
1982		2963	5304	8267	11467	19734	172951
1983		2794	5601	8395	16753	25148	198099
1984		2776	6007	8783	19150	27933	226032
1985		2635	6580	9215	20645	29860	255892

(a) - After takeover of AOC by Govt. in Oct. 1981, its production wing was merged with OIL . So the production figures shown under AOC are upto 14th October, 1981, thereafter the same have been merged with OIL.

COMPANYWISE PRODUCTION OF CRUDE OIL IN INDIA
(FINANCIAL YEARS)

('000 Tonnes)

Year	Onshore				Offshore	Grand	Cumulative production
	AOC	OIL	ONGC	TOTAL	ONGC	Total	since inception
1	2	3	4	5	6	7	8
1965-66	151	1895	1427	3473	-	3473	19915
1966-67	148	2217	2538	4903	-	4903	24818
1967-68	128	2836	2821	5785	-	5785	30603
1968-69	117	2848	3084	6059	-	6059	36662
1969-70	112	3079	3627	6819	-	6819	43481
1970-71	104	3084	3634	6822	-	6822	50303
1971-72	97	3159	4003	7299	-	7299	57602
1972-73	90	3131	4100	7321	-	7321	64923
1973-74	82	3079	4028	7189	-	7189	72112
1974-75	71	3079	4534	7684	-	7684	79796
1975-76	66	3103	5279	8448	-	8448	88244
1976-77	62	3085	5345	8492	406	8898	97142
1977-78	57	3113	5519	8689	2074	10763	107905
1978-79	53	2671	5599	8323	3310	11633	119538
1979-80	40	2215	5089	7344	4422	11766	131304
1980-81	48	1243	4231	5522	4985	10507	141811
1981-82	23(e)	2995	5201	8219	7975	16194	158005
1982-83		2830	5356	8186	12877	21063	179068
1983-84		2873	5755	8628	17392	26020	205088
1984-85		2735	6119	8854	20136	28990	234078
1985-86*		2654	6691	9345	20823	30168	264246

* Provisional.

(e) = After take-over of AOC by Govt. in Oct.1981,its production wing was merged with OIL. So the production figures shown under AOC are upto 14th Oct. 1981 thereafter the same have been merged with OIL.

STATE-WISE PRODUCTION OF CRUDE OIL IN INDIA

('000 Tonnes)

YEAR	ON SHORE				OFFSHORE	GRAND TOTAL
	Arunachal	Assam	Gujarat	TOTAL	Bombay High	
1	2	3	4	5	6	7
			CALANDER YEARS			
1960	-	451	-	451	-	451
1965	-	2900	1122	3022	-	3022
1970	-	3359	3450	6809	-	6809
1971	-	3542	3643	7185	-	7185
1972	-	3653	3720	7373	-	7373
1973	-	3594	3604	7198	-	7198
1974	-	3735	3755	7490	-	7490
1975	-	4189	4094	8283	-	8283
1976	-	4267	4164	8431	228	8659
1977	-	4510	4237	8747	1438	10185
1978	-	4076	4227	8303	2968	11271
1979	-	4563	3869	8432	4407	12839
1980	2	1056	3812	4870	4529	9399
1981	2	4373	3544	7919	-7006	14925
1982	1	5124	3142	8267	11467	19734
1983	25	4901	3469	8395	16753	25148
1984	42	4939	3802	8783	19150	27933
1985	60	4879	4276	9215	20645	29860
			FINANCIAL YEARS			
1960-61	-	448	-	448	-	448
1965-66	-	2046	1427	3473	-	3473
1970-71	-	3367	3455	6822	-	6822
1971-72	-	3630	3669	7299	-	7299
1972-73	-	3609	3712	7321	-	7321
1973-74	-	3589	3600	7189	-	7189
1974-75	-	3814	3870	7684	-	7684
1975-76	-	4300	4148	8448	-	8448
1976-77	-	4305	4187	8492	406	8898
1977-78	-	4534	4155	8689	2074	10763
1978-79	-	4085	4238	8323	3310	11633
1979-80	-	3578	3766	7344	4422	11766
1980-81	2	1712	3808	5522	4985	10507
1981-82	2	4795	3422	8219	7975	16194
1982-83	1	5000	3185	8186	12877	21063
1983-84	31	5009	3588	8628	17392	26020
1984-85	51	4893	3910	8854	20136	28990
1985-86*	60	4966	4319	9345	20823	30168

* Provisional.

VIII. NATURAL GAS

State wise Reserves of Natural Gas@

(Bn.Cubic Metres)

YEAR	ON SHORE			Total	OFF SHORE	Grand Total
	Gujarat	Assam	Rajasthan		Bomaby High	
1	2	3	4	5	6	7
1966	23.09	40.06	-	63.15	-	63.15
1967	24.65	42.60	-	67.25	-	67.25
1968	21.80	41.54	-	63.34	-	63.34
1969	22.90	42.70	-	65.60	-	65.60
1970	19.66	42.82	-	62.48	-	62.48
1971	18.84	43.45	-	62.29	-	62.29
1972	16.88	45.25	0.38	62.51	-	62.51
1973	16.35	49.71	0.38	66.44	-	66.44
1974	16.18	51.30	0.38	67.86	-	67.86
1975	15.72	65.24	0.43	81.39	6.28	87.67
1976	16.41	61.42	0.43	78.26	106.62	184.88
1977	16.20	63.76	0.43	80.39	148.08	228.47
1978	15.66	63.62	0.43	79.71	186.15	265.86
1979	15.80	63.35*	0.43	79.58	264.64	344.22
1980	16.39	63.53*	0.43	80.95	270.96	351.91
1981	15.99	65.19*	0.43	81.61	329.04	410.65
1982	18.18	70.66*	0.43	89.27	330.62	419.83
1983	18.95	78.67*	0.43	98.05	377.21	475.26
1984	18.60	81.31*	0.54	100.54	377.80	478.25
1985	21.87	87.67*	0.54	110.08	368.55	478.63
1986	26.99	91.83*	0.54	119.36	377.69	497.05

@ Proved & Indicated Balance Recoverable Reserves.
* Includes Natural Gas Reserves in Tripura & Nagaland.

Note : For AOC & OIL the figures relate to 1st January of each year but in case of ONGC the date pertains to 1st October upto the year 1974 and thereafter to 1st January of each year.

STATE-WISE GROSS PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

YEAR	ONSHORE			OFFSHORE	GRAND
	Assam	Gujarat	Total	Bombay High	TOTAL
1.	2.	3.	4.	5.	6.
		CALENDER YEAR			
1970	966	458	1424	-	1424
1971	993	516	1509	-	1509
1972	1031	533	1564	-	1564
1973	1155	519	1674	-	1674
1974	1328	590	1918	-	1918
1975	1550	760	2310	-	2310
1976	1595	815	2410	28	2438
1977	1677	888	2565	161	2726
1978	1527	903	2430	340	2770
1979	1709	843	2552	532	3084
1980	621	868	1489	588	2077
1981	1605	761	2366	1120	3486
1982	1855	741	2596	2065	4661
1983	1903	760	2664@	3104	5768
1984	2027	758	2786	4034	6820
1985	2053	884	2937	4971	7908
		FINANCIAL YEARS			
1970-71	980	465	1445	-	1445
1971-72	1012	523	1535	-	1535
1972-73	1034	531	1565	-	1565
1973-74	1195	518	1713	-	1713
1974-75	1388	653	2041	-	2041
1975-76	1595	773	2368	-	2368
1976-77	1558	822	2380	48	2428
1977-78	1717	893	2610	229	2839
1978-79	1518	908	2426	386	2812
1979-80	1385	840	2225	542	2767
1980-81	843	842	1685	673	2358
1981-82	1748	758	2506	1345	3851
1982-83	1829	750	2579	2357	4936
1983-84	1954	748	2702	3259	5961
1984-85	2058@	775	2833	4408	7241
1985-86*	2335@	919	2954	5180	8134

@ = Includes one million Cubic Metres of Natural Gas production from Arunachal Pradesh in 1984-85 and 6 Milllion Cubic Metres of natural gas in 1985-86.

* = Provisional.

State-wise Gross and Net Production of Natural Gas

(Mn. Cubic Metres)

PERIOD	Gross Prodn.	Re-injected	Flarred	Net Prodn.
1.	2.	3.	4.	5.
		ON-SHORE		
GUJARAT				
1970-71	465	-	155	310
1971-72	523	-	143	380
1972-73	531	-	117	414
1973-74	518	-	144	374
1974-75	653	-	121	532
1975-76	773	-	136	637
1976-77	822	-	131	691
1977-78	893	-	147	746
1978-79	908	-	164	744
1979-80	840	-	178	662
1980-81	842	-	146	696
1981-82	758	-	77	681
1982-83	750	-	55	695
1983-84	748	-	67	681
1984-85	775	-	85	690
1985-86	919	-	118	801
ASSAM				
1970-71	980	36	607	337
1971-72	1012	49	625	338
1972-73	1034	141	536	357
1973-74	1195	115	692	388
1974-75	1388	139	830	419
1975-76	1595	162	946	487
1976-77	1558	190	678	690
1977-78	1717	184	818	715
1978-79	1518	148	607	763
1979-80	1385	127	616	642
1980-81	843	67	257	519
1981-82	1748	110	768	870
1982-83	1829	91	876	862
1983-84	1954	45	1025	884
1984-85	2058	48	1074	936
1985-86	2035	66	887	1082

(Contd..)

State-wise Gross and Net Production of Natural Gas.

(Mn. Cubic Metres)

PERIOD	Gross Prodn.	Reinjected	Flarred	Net Prodn.
1.	2.	3.	4.	5.
		OFFSHORE		
BOMBAY-HIGH				
1970-71	-	-	-	-
1971-72	-	-	-	-
1972-73	-	-	-	-
1973-74	-	-	-	-
1974-75	-	-	-	-
1975-76	-	-	-	-
1976-77	48	-	48	-
1977-78	229	-	226	3
1978-79	386	-	182	204
1979-80	542	-	170	372
1980-81	673	-	366	307
1981-82	1345	-	674	671
1982-83	2357	-	957	1400
1983-84	3259	-	1425	1834
1984-85	4408	-	1893	2515
1985-86	5180	-	2113	3067
TOTAL				
1970-71	1445	36	762	647
1971-72	1535	49	768	718
1972-73	1565	141	653	771
1973-74	1713	115	836	762
1974-75	2041	139	951	951
1975-76	2368	162	1082	1124
1976-77	2428	190	857	1381
1977-78	2839	184	1191	1464
1978-79	2812	148	953	1711
1979-80	2767	127	964	1676
1980-81	2358	67	769	1522
1981-82	3851	110	1519	2222
1982-83	4936	91	1888	2957
1983-84	5961	45	2517	3399
1984-85	7241	48	3052	4141
1985-86	8134	66	3118	4950

State-wise Utilisation of Natural Gas in India

(Mn. Cubic Metres)

YEAR	ON-SHORE			OFFSHORE	GRAND TOTAL
	Gujarat	Assam	Total	BOMBAY HIGH	
1.	2.	3.	4.	5.	6.
1970-71	310	337	647	-	647
1971-72	380	338	718	-	718
1972-73	414	357	771	-	771
1973-74	374	388	762	-	762
1974-75	532	419	951	-	951
1975-76	637	487	1124	-	1124
1976-77	691	690	1381	-	1381
1977-78	746	715	1461	3	1464
1978-79	744	763	1507	204	1711
1979-80	662	642	1304	372	1676
1980-81	696	519	1215	307	1522
1981-82	681	870	1551	671	2222
1982-83	695	862	1557	1400	2957
1983-84	681	884	1565	1834	3399
1984-85	690	936	1626	2515	4141
1985-86*	801	1082	1883	3067	4950

* Provisional

INDUSTRY-WISE OFFTAKES OF NATURAL GAS IN INDIA.

(Million Cubic Metres)

YEAR	Energy Purposes							Non Energy Purpose				
	Power Generation	Industrial Fuel	Tea plant-ation	LPG Shrinkage	Domestic Fuel	Captive use	Total	Ferti-lizer Industry	Petro-chemicals	Others	Total	Grand Tot:
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1970-71	261	116	15	-	-	68	460	187	-	-	187	647
1971-72	313	129	19	-	-	61	522	196	-	-	196	718
1972-73	339	148	20	-	Neg.	63	570	201	-	-	201	771
1973-74	323	157	22	-	Neg.	81	583	179	-	-	179	762
1974-75	354	164	29	-	6	80	633	318	-	-	318	951
1975-76	366	143	33	-	13	104	659	463	-	2	465	1124
1976-77	344	155	38	-	15	142	694	663	-	24	687	1381
1977-78	372	165	39	-	13	171	760	673	9	22	704	1464
1978-79	560	175	43	-	13	176	967	721	5	18	744	1711
1979-80	514	156	39	-	13	174	896	755	7	18	780	1676
1980-81	492	163	45	-	14	176	890	611	5	16	632	1522
1981-82	612	166	47	37	15	327	1204	991	8	19	1018	2222
1982-83	1025	185	51	100	14	399	1774	1155	7	21	1183	2957
1983-84	1209	230	56	161	16	411	2083	1283	10	23	1316	3399
1984-85	1454	250	62	190	18	531	2505	1603	11	22	1636	4141
1985-86 *	1299	223	78	275	21	520	2416	2500	10	24	2534	4950

Neg. = Negligible
* = Provisional.

IX. REFINING

Petroleum Refining Capacity In India. As on 1.4.1986

(Million Tonnes Per Annum)

Refinery	Year of Commissioning	Installed capacity as on 1.4.1986	Capacity after expansion under consideration/implementation	likely date of Commissioning
1.	2.	3.	4.	5.
A. Refineries in Operation:				
1. IOC, Digboi	1901	0.50		
2. BPCL, Bombay	1955	6.00		
3. HPCL, Bombay	1954	3.50		
4. HPCL, Vizag	1957	4.50		
5. IOC, Gauhati	1962	0.85		
6. IOC, Barauni	1964	3.30		
7. IOC, koyali	1965	7.30		
8. IOC, Haldia	1974	2.50		
9. IOC, Mathura	1982	6.00		
10. CRL, Cochin	1966	4.50		
11. MRL, Madras	1969	5.60		
12. BRPL, Assam	1979	1.00		
	TOTAL:	45.55		
B. Refineries under Expansion:				
1. Mathura		6.00	7.50	July,1988
2. Koyali		7.30	9.50	Dec.,1987
3. BRPL		1.00	3.50	
B. Projects under Consideration:				
1. Karnal			6.00	
2. Mangalore			3.00	

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1960 TO 1985

('000' Tonnes)

YEAR	CRUDE THROUGHPUT			PRODUCTION		
	Public Sector	Private Sector	Total (2+3)	Public Sector	Private Sector	Total (5+6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	CALENDAR YEARS.					
1960	-	6091	6091	-	5747	5747
1961	-	6440	6440	-	6090	6090
1962	241	6762	7003	193	6391	6584
1963	470	7668	8138	407	7243	7650
1964	911	8021	8932	778	7650	8428
1965	1549	8205	9754	1328	7785	9113
1966	3476	8554	12030	3186	8097	11283
1967	6359	8071	14430	5814	7638	13452
1968	7707	8389	16096	7085	7838	14923
1969	9514	7981	17495	8736	7503	16239
1970	10994	7465	18459	10132	7040	17172
1971	11198	8390	19588	10293	7932	18225
1972	11838	7834	19672	10835	7363	18198
1973	11484	9034	20518	10522	8567	19089
1974	15107	5676	20783	13935	5306	19241
1975	16723	5112	21835	15602	4766	20368
1976	21163	1599	22762	19669	1519	21188
1977	23903	527	24430	22297	498	22795
1978	25096	530	25626	23372	505	23877
1979	27649	504	28153	25874	486	26360
1980	24668	407	25075	23213	384	23597
1981	29128	400	29528	27193	382	27575
1982	32107	-	32107	29984	-	29984
1983	34534	-	34534	32298	-	32298
1984	35235	-	35235	32963	-	32963
1985	41226	-	41226	38264	-	38264

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1960-61 TO 1985-86

('000' Tonnes)

Y E A R	CRUDE THROUGHPUT			PRODUCTION		
	Public Sector	Private Sector	Total (2+3)	Public Sector	Private Sector	Total (5+6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			FINANCIAL YEARS			
1960-61	--	6130	6130	--	5777	5777
1961-62	60	6524	6584	11	6184	6195
1962-63	300	6964	7264	274	6627	6901
1963-64	554	7920	8474	493	7492	7985
1964-65	1005	8005	9010	842	7636	8478
1965-66	1966	8267	10233	1733	7828	9561
1966-67	4166	8547	12713	3741	8141	11882
1967-68	6783	8022	14805	6257	7512	13769
1968-69	8088	8459	16547	7457	7932	15389
1969-70	10087	7825	17912	9250	7342	16592
1970-71	10820	7559	18379	9965	7145	17110
1971-72	11575	8467	20042	10623	8016	18639
1972-73	11565	7763	19328	10575	7255	17830
1973-74	11616	9342	20958	10647	8848	19495
1974-75	15572	5522	21904	11572	8031	19603
1975-76	17045	5238	22283	15895	4934	20829
1976-77	21694	1301	22995	20203	1229	21432
1977-78	24364	534	24898	22712	507	23219
1978-79	25450	524	25974	23692	501	24193
1979-80	27066	408	27474	25403	391	25794
1980-81	25333	503	25836	23646	477	24123
1981-82	29912	234	30146	27931	251	28182
1982-83	33156	--	33156	31073	--	31073
1983-84	35263	--	35263	32926	--	32926
1984-85	35556	--	35556	33236	--	33236
1985-86	42910	--	42910	39881	--	39881

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION(NET) OF POL PRODUCTS 1960-61 - 1985-86

('000' Tonnes)

Y E A R	AOC/ AOD	BSR/ BPCL	ESSO/ HPCL	CORIL/ HPC(VMU)	GUWHATI	BARAUNI
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61:						
Total Production	416	2731	1772	858	---	----
Crude Run	446	2879	1904	901	---	----
1965-66:						
Total Production	479	3743	2552	1053	721	613
Crude Run	488	3989	2672	1118	804	753
1970-71:						
Total Production	452	3333	2275	1085	631	1996
Crude Run	476	3541	2367	1175	686	2191
1975-76:						
Total Production	489	3438	2635	1007	762	2722
Crude Run	527	3630	2830	1081	827	2949
1980-81:						
Total Production	477	4629	2907	1208	577	432
Crude Run	503	4901	3113	1319	639	504
1981-82:						
Total Production	474	4754	3253	1067	667	2773
Crude Run	496	4999	3483	1178	746	3031
1982-83:						
Total Production	501	4272	2926	1004	733	2861
Crude Run	521	4485	3124	1077	802	3071
1983-84:						
Total Production	528	5073	3104	977	797	2662
Crude Run	549	5258	3308	1093	871	2907
1984-85:						
Total Production	511	5230	3021	1157	712	2710
Crude Run	531	5481	3220	1249	761	2896
1985-86*:						
Total Production	511	5981	4102	2438	696	2513
Crude Run	529	6389	4375	2659	766	2766

*Provisional.

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION (NET) OF POL PRODUCTS: 1960-61 - 1985-86

('000' Tonnes)

Y E A R	GUJARAT	HALDIA	MATHURA	CRL	MRL	BR & P	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1960-61:							
Total Production	-	-	-	-	-	-	5777
Crude Run	-	-	-	-	-	-	6130
1965-66:							
Total Production	400	-	-	-	-	-	9561
Crude Run	409	-	-	-	-	-	10233
1970-71:							
Total Prod.	3208	-	-	2346	1784	-	17110
Crude Run	3463	-	-	2498	1982	-	18379
1975-76:							
Total Prod.	3854	1295	-	2187	2435	-	20829
Crude Run	4107	1348	-	2294	2690	-	22283
1980-81:							
Total Prod.	6629	2056	-	2795	2376	37	24123
Crude Run	6974	2308	-	2912	2611	52	25836
1981-82:							
Total Prod.	6711	2067	466	2999	2570	381	28182
Crude Run	7042	2277	520	3120	2801	453	30146
1982-83:							
Total Prod.	6667	2301	3610	3048	2635	515	31073
Crude Run	7089	2503	3844	3187	2857	596	33156
1983-84:							
Total Prod.	6813	2351	4914	2740	2438	529	32926
Crude Run	7331	2580	5223	2847	2647	649	35263
1984-85:							
Total Prod.	7290	2101	5909	826	3139	630	33236
Crude Run	7777	2365	6239	872	3413	752	35556
1985-86*:							
Total Prod.	7305	2579	5734	2560	4723	739	39881
Crude Run	7830	2822	6075	2749	5057	893	42910

* Provisional.

TRENDS IN DOMESTIC PRODUCTION OF PERTOLEUM PRODUCTS DURING THE PERIOD 1970-71 TO 1985-86.

(Qty. '000' Tonnes)

Products	1970-71	1975-76	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985 86(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Light Distillates	3021	3630	4051	4295	4459	4101	5138	5313	6134	6315	8253
of which :											
LPG*	169	331	383	403	406	366	410	406	514	596	867
Mogas	1526	1275	1423	1515	1512	1519	1614	1797	1937	2144	2306
Naphtha	1205	1910	2120	2262	2415	2115	3004	2986	3578	3470	4955
2. Middle Distillates	8562	10769	12079	12476	13080	12115	14134	15625	16873	17226	21613
of which :											
Kerosene	2896	2439	2450	2514	2539	2396	2907	3393	3528	3364	4030
ATF	710	925	1077	1177	1104	1001	1009	1137	1195	1297	1519
HSD	3840	6285	7129	7350	7975	7371	9042	9761	10862	11086	14624
LDO	986	946	1224	1227	1230	1108	949	1121	1081	1253	1177
3. Heavy Ends	5527	6430	7089	7422	8255	7907	8910	10135	9919	9694	10015
of which											
F.O.	2987	3595	3454	3425	4086	4041	4015	4829	4588	4095	3791
LSHS/HHS	1103	1488	1878	2219	2265	2079	2893	3135	3412	3791	4164
Total Fuel Oils	4090	5083	5332	5644	6351	6120	6908	7964	8000	7886	7955
Lube Oils	231	342	413	490	487	426	407	434	470	414	501
Petroleum Coke	151	160	155	122	99	86	141	149	136	181	192
Bitumen	805	697	992	962	1103	1082	1298	1397	1069	944	1107
TOTAL PRODUCTION:	17110	20829	23219	24193	25794	24123	28182	31073	32926	33236	39881
Crude Throughput	18379	22283	24898	25974	27474	25836	30146	33156	35263	35556	42910
LPG Production from Natural Gas	--	--	--	--	--	--	73	169	223	277	363

(P) = Provisional.

* = Excludes LPG production from Natural Gas.

PRODUCTION OF PERTOLEUM PRODUCTS - 1982 TO 1985.

('000' Tonnes)

PRODUCT	PRODUCTION				% Variation	
	1982	1983	1984	1985 (P)	1984/1983	1985/1984
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a) From Crude Oil:						
1. Light Distillates:	5112	5954	6226	7745	+ 4.6	+24.4
of which						
L.P. Gas	377	484	583	788	+ 20.5	+35.2
Naphtha	2871	3473	3479	4586	+ 0.2	+31.8
Mogas	1750	1880	2062	2252	+ 9.7	+ 9.2
SBPS/Hexane	49	43	28	30	- 34.9	+ 7.1
2. Middle Distillates:	15013	16512	17003	20451	+ 3.0	+20.3
of which						
ATF/Jet A-1	1092	1163	1332	1462	+ 14.5	+ 9.8
Kerosene	3253	3467	3304	3842	- 4.7	+16.3
M.T.O.	90	84	105	104	+ 25.0	- 1.0
H.S.D.	9365	10588	10954	13725	+ 3.5	+25.3
L.D.O.	1104	1077	1197	1156	+ 11.1	- 3.4
J.B.O.	61	80	50	96	- 37.5	+92.0
3. Heavy Ends:	9859	9832	9734	10068	- 1.0	+ 3.4
of which						
F.O.	4801	4486	4296	3944	- 4.2	- 8.2
LSHS/HHS	3001	3335	3618	4152	+ 8.5	+14.8
Total (Fuel Oils)	7802	7821	7914	8096	+ 1.2	+ 2.3
Lube Oils	404	462	455	470	- 1.5	+ 3.3
Bitumen	1300	1216	919	1069	- 24.4	+16.3
Pet. Coke*	159	127	174	180	+ 37.0	+ 3.4
Waxes	58	63	66	77	+ 4.8	+16.7
4. Total Production:	29984	32298	32963	38264	+ 2.1	+16.1
5. Crude Run:	32107	34534	35265	41226	+ 2.0	+17.0
(b) From Natural Gas:						
6. L.P.G.	145	208	261	342	+ 25.5	+31.0

* Includes calcined Pet. Coke (P) Provisional.

PATTERN OF REFINERY PRODUCTION:

(Percentages)

PRODUCTS	1982	1983	1984	1985
Light Distillates@	15.9	17.2	17.7	18.8
Middle Distillates	46.8	47.8	48.3	49.6
Heavy Fuel Oils	24.3	22.7	22.5	19.6
Bitumens	4.0	3.5	2.6	2.6
Lubes	1.3	1.3	1.3	1.1
Others	1.1	0.9	1.1	1.1
Total Production	93.4	93.4	93.6	92.8
RBF & Losses/Inventories	6.6	6.6	6.4	7.2
Crude Run	100	100	100	100

PRODUCTION OF PERTOLEUM PRODUCTS - 1982-83 TO 1985-86

('000' Tonnes)

PRODUCT	PRODUCTION				% Variation	
	1982-83	1983-84	1984-85	1985-86(P)	1984-85 / 1983-84	1985-86 / 1984-85
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(b) From Crude Oil:						
1. Light Distillates:	5313	6134	6315	8253	+ 3.0	+30.7
of which						
L.P.Gas	406	514	596	867	+ 16.0	+45.5
Naphtha	2986	3578	3470	4955	- 3.0	+42.8
Mogas	1797	1937	2144	2306	+ 10.7	+ 7.6
SBPS/Hexane	54	33	29	31	- 12.1	+ 6.9
2. Middle Distillates:	15625	16873	17226	21613	+ 2.1	+25.5
of which						
ATF/Jet A-1	1137	1195	1297	1519	+ 8.5	+17.1
Kerosene	3393	3528	3364	4030	- 4.6	+19.8
M.T.O.	98	82	107	106	+ 30.5	- 0.9
H.S.D.	9761	10862	11086	14624	+ 2.1	+31.9
L.D.O.	1121	1081	1253	1177	+ 15.9	- 6.1
J.B.O.	60	74	61	91	- 17.6	+49.2
3. Heavy Ends:	10135	9919	9694	10015	- 2.3	+ 3.3
of which						
F.O.	4829	4588	4095	3791	- 10.5	- 7.4
LSHS/HHS	3135	3412	3791	4164	+ 11.1	+ 9.8
Total Fuel Oils	7964	8000	7886	7955	- 1.4	+ 0.9
Lube Oils	434	470	414	501	- 11.9	+21.0
Bitumens	1397	1069	944	1107	- 11.7	+17.3
Pet. Coke	149	136	181	192	+ 33.1	+ 6.1
Waxes	58	64	73	81	+ 14.1	+11.0
4. Total Production:	31073	32926	33236	39881	+ 0.9	+20.0
5. Crude Run	33156	35263	35556	42910	+ 0.8	+20.7
(b) From Natural Gas:						
6. L.P. Gas	169	223	277	363	+ 24.2	+31.0

(P) Provisional. * Includes calcined Pet. Coke.

PATTERN OF REFINERY PRODUCTION:

(Percentages)

PRODUCTS	82-83	83-84	84-85	1985-86
Light Distillates	16.0	17.4	17.8	19.2
Middle Distillates	47.1	47.9	48.4	50.4
Heavy Fuel Oils	24.0	22.7	22.2	18.5
Bitumens	4.2	3.0	2.7	2.6
Lubes	1.3	1.3	1.2	1.2
Others	1.1	1.1	1.2	1.0
Total Production	93.7	93.4	93.5	92.9
RBF & Losses/Invenories	6.3	6.6	6.5	7.1
Crude Run	100	100	100	100

X. CONSUMPTION/SALES

TOTAL SALES/CONSUMPTION OF PETROLEUM PRODUCTS
(Incl. Sales to Nepal*, Sikkim, Bhutan and Bunkers/ International Airlines)

Qty. '000' Tonnes.

Year	Total Consumption	% age Growth	Year	Total consumption	% age Growth
1.	2.	3.	4.	5.	6.
1948	2657	- 2.9	1948-49	2774e	+ 2.1
1949	3125	+17.6	1949-50	3174e	+14.4
1950	3319	+ 6.2	1950-51	3485e	+ 9.8
1951	3888	+17.1	1951-52	3851e	+10.5
1952	3741	- 3.8	1952-53	3785e	- 1.7
1953	3916	+ 4.7	1953-54	3948e	+ 4.3
1954	4089	+ 4.4	1954-55	4270e	+ 8.2
1955	4817	+17.8	1955-56	4920e	+15.2
1956	5229	+ 8.6	1956-57	5376e	+ 9.3
1957	5819	+11.3	1957-58	5894e	+ 9.6
1958	6117	+ 5.1	1958-59	6291e	+ 6.7
1959	6812	+11.4	1959-60	7100e	+12.9
1960	7964	+16.9	1960-61	8285	+16.7
1961	8570	+ 7.6	1961-62	8724	+ 5.3
1962	9536	+11.3	1962-63	9832	+12.7
1963	10387	+ 8.9	1963-64	10671	+18.3
1964	11478	+10.5	1964-65	11700	+ 9.7
1965	12356	+ 7.6	1965-66	12437	+ 6.3
1966	12990	+ 5.1	1966-67	13348	+ 7.3
1967	14133	+ 8.8	1967-68	14397	+ 7.9
1968	15871	+12.3	1968-69	16305	+13.3
1969	17371	+ 9.3	1969-70	17797	+ 9.2
1970	18816	+ 8.3	1970-71	19135	+ 7.5
1971	20706	+10.0	1971-72	21299	+11.3
1972	22675	+ 9.5	1972-73	22978	+11.3
1973	23726	+ 4.6	1973-74	23574	+ 2.6
1974	23023	- 3.0	1974-75	23302	+ 1.2
1975	23541	+ 2.2	1975-76	23673	+ 1.6
1976	24897	+ 5.8	1976-77	25400	+ 7.3
1977	26570	+ 6.7	1977-78	26990	+ 6.3
1978	28894	+ 8.7	1978-79	29719	+10.1
1979	31306	+ 8.3	1979-80	31323	+ 5.4
1980	31633	+ 1.0	1980-81	32261	+ 3.0
1981	34037	+ 7.6	1981-82	34107	+ 5.7
1982	35403	+ 4.0	1982-83	36395	+ 6.7
1983	37223	+ 5.1	1983-84	37776	+ 3.8
1984	39934	+ 7.3	1984-85	40828	+ 8.1
1985(P)	42508	+ 6.4	1985-86(P)	42819	+ 4.9

NOTE:- i) Includes Refinery fuel from 1960/1960-61 onwards.
ii) Prior to that Refinery fuel consumption is not available.
* - Excludes sales to Nepal from 1975/1975-76 onwards.
(P)- Provisional.
e - Estimated.

TRENDS IN SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE PERIOD 1970-71 TO 1985-86.

('000' Tonnes)

PRODUCT	1970 -71	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 86(P)	Annual Growth Rate of 1984-85/1970-71
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. LIGHT DISTILLATES:	2697	3596	4042	4228	4583	4460	4388	5187	5420	5600	6318	6766	6.3
of which: LPG	176	336	368	391	408	410	405	492	601	746	953	1228	13.8
Mogas	1453	1275	1316	1391	1499	1490	1522	1599	1722	1891	2084	2264	3.0
Naphtha	904	1836	2196	2290	2515	2413	2325	2963	2958	2804	3125	3121	8.6
2. MIDDLE DISTILLATES:	9040	11653	12655	13771	15172	16321	17056	17919	19660	20651	22429	23725	6.6
of which : Kerosene	3283	3104	3322	3634	3952	3872	4228	4693	5214	5524	5959	6200	4.3
ATF/Jet A-1	689	897	956	1041	1154	1144	1125	1128	1145	1208	1336	1440	5.0
HSD	3837	6595	7106	7736	8638	9801	10345	10832	12013	12600	13696	14738	9.4
LDO	1092	878	1082	1164	1216	1266	1122	1036	1067	1097	1198	1098	0.1
3. HEAVY ENDS:	6175	7198	7404	7540	8486	9102	9452	9417	9577	9590	10048	9895	3.2
FO/TDO	3513	4279	4220	3958	4395	4796	5406	4306	4208	4207	4256	3725	0.4
LSHS	962	1381	1499	1847	2189	2268	2065	2878	3093	3351	3688	3988	8.6
HHS	189	121	14	34	84	17	2						
Total Fuel Oils	4664	5781	5733	5839	6668	7081	7473	7184	7301	7558	7944	7713	3.4
Lube Oils	523	425	436	459	526	546	570	567	577	590	634	651	1.5
Greases	22	16	18	19	18	20	23	25	28	27	30	32	2.6
Lubes & Greases (Total)	545	441	454	478	544	566	593	592	605	617	664	683	1.5
Bitumens	777	690	882	908	943	1069	1064	1292	1379	1050	935	1118	2.5
Petroleum Coke	107	151	175	146	155	185	137	174	103	114	234	149	2.2
Other Misc.	82	135	160	170	176	201	185	175	189	251	271	232	7.2
TOTAL (1+2+3):	17912	22447	24101	25539	28241	29883	30896	32523	34657	35841	38795	40386	5.6
Refinery Fuel	1223	1226	1299	1451	1478	1440	1365	1584	1738	1935	2033	2433	4.7
GRAND TOTAL:	19135	23673	25400	26990	29719	31323	32261	34107	36395	37776	40828	42829	5.5

(P) = Provisional.

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1981 TO 1985.

(Qty. '000' Tonnes)

PRODUCT	1981	1982	1983	1984	1985	% change 1985/84	% age of Total 1985
1.	2.	3.	4.	5.	6.	7.	8.
1.Light Distillates:	5125	5327	5390	6223	6670	7.2	15.7
L.P. Gas	468	560	702	886	1161	31.0	2.7
Naphtha	2954	2944	2696	3153	3126	-0.9	7.4
Mogas	1574	1691	1834	2026	2229	10.0	5.2
SBP/Hexane	46	48	52	53	62	17.0	0.2
Others	83	84	106	105	92	-12.4	0.2
2.Middle Distillates	17714	19166	20363	21855	23493	7.5	55.3
Kerosene	4588	5125	5392	5838	6128	5.0	14.4
ATF/Jet A-1	1116	1128	1187	1302	1417	8.8	3.4
HSD	10748	11642	12459	13310	14581	9.5	34.3
LDO/MDO	1022	1050	1095	1175	1121	-4.6	2.6
JBO	79	70	76	65	77	18.5	0.2
MTO	92	87	85	98	97	-0.1	0.2
Others	68	64	69	67	72	7.5	0.2
3. Heavy Ends:	9651	9340	9591	9851	10031	1.8	23.6
(a) Fuel Oils(total)	7369	7126	7527	7786	7847	0.8	18.5
F.O./TDO	4607	4107	4269	4221	3892	-7.8	9.2
LSHS/HHS	2762	3019	3258	3565	3955	10.9	9.3
(b) Lubes & Greases	616	597	605	653	682	4.4	1.6
(c) Bitumen/Asphalt	1302	1304	1134	944	1102	16.7	2.6
(d) Pet. coke	188	125	101	202	174	-13.9	0.4
(e) Wax	71	56	75	68	65	-4.4	0.2
(f) Others	105	132	149	198	161	-18.7	0.3
Total (1+2+3)	32490	33833	35344	37929	40194	6.0	94.6
Refinery Fuel@	1547	1570	1879	2005	2314	15.4	5.4
GRAND TOTAL:	34037	35403	37223	39934	42508	6.4	100.0

@ = RBF, Lube Refinery Fuel & TPs Fuel.
P = Provisional.

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS
DURING THE YEARS 1981-82 TO 1985-86

(Qty. '000' Tonnes)

PRODUCT	1982 -83	1983 -84	1984*	1985 -86(P)	% change 1985-86 1984-85	% age of Total 1984-85
1.	2.	4.	5.	6.	7.	8.
1.Light Distillates:	5420	5600	6318	6766	7.1	15.8
L.P. Gas	601	746	953	1228	28.9	2.9
Naphtha	2958	2804	3125	3128	+0.1	7.3
Mogas	1722	1891	2084	2264	8.6	5.3
SBP/Hexane	47	54	51	48	-5.9	0.1
Others	92	105	105	98	-6.7	0.2
2. Middle Distillates:	19660	20651	22429	23725	5.3	55.4
Kerosene	5214	5524	5959	6200	4.0	14.5
ATF/Jet A-1	1145	1208	1336	1440	7.8	3.4
HSD	12013	12600	13696	14738	7.6	34.4
LDO/MDO	1067	1097	1198	1098	-8.3	2.6
JBO	72	64	76	82	7.9	0.2
MTO	85	88	99	100	1.0	0.2
Others	64	70	65	67	3.1	0.1
3. Heavy Ends:	9577	9590	10048	9895	-1.5	23.1
(a) Fuel Oils(total)	7301	7558	7944	7713	-2.9	18.0
F.O./TDO	4208	4207	4256	3725	-12.5	8.7
LSHS/HHS	3093	3351	3688	3988	8.1	9.3
(b) Lubes & Greases	605	617	664	683	2.9	1.6
(c) Bitumen/Asphalt	1379	1050	935	1118	19.6	2.6
(d) Wax	60	70	77	64	-16.9	0.1
(e) Pet.coke	103	114	234	159	-32.1	0.4
(f) Others	129	181	194	158	-18.6	0.4
Total (1+2+3)	34657	35841	38795	40386	4.1	94.3
Refinery Fuel@	1738	1935	2033	2433	19.7	5.7
GRAND TOTAL:	36395	37776	40828	42819	4.9	100.0

* = Revised.
@ = RBF, Lube Refinery Fuel & TPs Fuel.
P = Provisional.

Seasonal Indices of the Sales/Consumption of Major Petroleum Products - in India.

MONTH	M. S.	A.T.F.	KEROSENE	H.S.D.	L.D.O.	BITUMEN	ALL Products
1.	2.	3.	4.	5.	6.	7.	8.
April	8.34	8.42	7.92	8.67	8.25	7.50	8.25
May	9.25	8.25	7.92	9.00	8.08	7.67	8.42
June	8.50	8.00	7.83	8.33	7.25	7.92	8.08
Ist Quarter Total	26.09	24.67	23.67	26.00	23.58	23.09	24.75
July	8.17	8.16	8.08	7.83	6.67	8.25	8.00
August	7.83	8.16	8.17	7.25	6.92	7.92	7.83
September	8.00	8.25	8.25	7.67	7.83	8.00	8.00
2nd Quarter Total	24.00	24.57	24.50	22.75	21.42	24.17	23.83
October	8.08	8.67	8.58	8.08	8.75	8.50	8.41
November	8.08	8.50	8.75	8.50	9.67	8.25	8.58
December	8.58	8.42	9.00	8.92	9.83	9.25	8.92
3rd Quarter Total	24.74	25.59	26.33	25.50	28.25	26.00	25.91
January	8.25	8.33	8.92	8.67	9.50	8.41	8.67
February	8.50	8.17	8.17	8.25	8.33	8.33	8.17
March	8.42	8.67	8.41	8.83	8.92	10.00	8.67
4th Quarter Total	25.17	25.17	25.50	25.75	26.75	26.74	25.51
TOTAL :	100	100	100	100	100	100	100

NOTE: Based on Sales/Consumption data from 1970-71 to 1984-85

SALES/CONSUMPTION OF PETROLEUM PRODUCT AND MARKET PARTICIPATION OF OIL COMPANIES IN INDIA. 1960-61 TO 1985-86.

(Qty. '000' Tonnes)

YEAR		I.O.C.	B Shell/ BPCL	Esso/ HPCL	Caltex/@ HPCL(VMU)	IBP	Others	TOTAL
1.		2.	3.	4.	5.	6.	7.	8.
1960-61	S/C	38	3722	2302	1270	155	498	7985
(E)	%	0.5	46.6	28.8	15.9	2.0	6.2	100
1965-66	S/C	2812	4270	2816	1390	168	461	11917
(E)	%	23.6	35.8	23.6	11.7	1.4	3.9	100
1970-71	S/C	9212	4219	2538	1279	291	373	17912
	%	51.4	23.6	14.2	7.1	1.6	2.1	100
1971-72	S/C	10959	4153	2717	1316	404	522	20071
	%	54.6	20.7	13.5	6.6	2.0	2.6	100
1972-73	S/C	12788	4085	2620	1185	474	564	21716
	%	58.9	18.8	12.1	5.4	2.2	2.6	100
1973-74	S/C	13745	3985	2392	1095	536	593	22346
	%	61.5	17.8	10.7	4.9	2.4	2.7	100
1974-75	S/C	14363	3184	2510	972	620	456	22105
	%	65.0	14.4	11.4	4.4	2.8	2.0	100
1975-76	S/C	14525	3151	2647	931	659	534	22447
	%	64.7	14.0	11.8	4.2	2.9	2.4	100
1976-77	S/C	15321	3775	2809	974	702	520	24101
	%	63.6	15.7	11.6	4.0	2.9	2.2	100
1977-78	S/C	15721	4217	3083	1146	826	546	25539
	%	61.5	16.5	12.1	4.5	3.2	2.2	100
1978-79	S/C	17223	4601	3488	1348	938	643	28241
	%	61.0	16.3	12.3	4.8	3.3	2.3	100
1979-80	S/C	18136	4968	3768	1393	1012	1618	29883
	%	60.7	16.6	12.6	4.7	3.4	2.0	100
1980-81	S/C	18494	5297	5596	--	1034	475	30896
	%	59.9	17.1	18.1	--	3.3	1.6	100
1981-82	S/C	20155	5317	5687	--	1107	257	32523
	%	62.0	16.3	17.5	--	3.4	0.8	100
1982-83	S/C	21317	5760	6079	--	1252	249	34657
	%	61.5	16.6	17.6	--	3.6	0.7	100
1983-84	S/C	21629	6211	6491	--	1326	184	35841
	%	60.4	17.3	18.1	--	3.7	0.5	100
1984-85	S/C	22977	7069	6995	--	1469	285	38795
(P)	%	59.2	18.2	18.0	--	3.8	0.8	100
1985-86	S/C	2355	7466	7594	--	1548	233	40386
(P)	%	58.3	18.5	18.8	--	3.8	0.6	100

S/C = Sales/Consumption
P = Provisional.
E = Estimated
@ = Included under ESSO/HPCL from 1980-81 onwards.

Deliveries* made to International/Coastal Bunkers during the year 1970-71 1975-76, 1979-80, 1980-81, 1981-82, 1982-83, 1983-84, 1984-85 & 1985-86

(Qty.'000' Tonnes)

I T E M S	1970 -71	1975 -76	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Shipping International Bunkers:									
F.O.	207.9	137.2	135.8	148.7	67.1	85.0	104.4	154.9	66.5
H.S.D.	6.4	11.4	17.7	15.4	16.8	14.5	17.0	12.4	10.5
L.D.O.	20.0	39.5	63.1	50.4	52.3	41.7	42.3	36.6	32.3
TOTAL	234.3	188.1	216.6	214.5	136.2	141.2	199.7	203.9	109.3
Coastal Bunkers:									
F.O.	196.9	178.3	126.4	128.9	149.6	172.2	142.0	143.2	169.2
H.S.D.	22.4	25.9	41.9	42.0	61.4	81.0	86.3	86.7	97.7
L.D.O.	21.6	28.1	28.4	32.4	36.8	47.8	47.1	49.0	40.1
TOTAL:	240.9	232.3	196.7	204.3	247.8	301.0	275.4	278.9	307.0
Total Bunkers:									
F.O.	404.8	315.5	262.2	277.6	216.7	257.2	282.4	298.1	235.7
H.S.D.	28.8	37.3	59.6	58.4	78.2	95.5	103.3	99.1	108.2
L.D.O.	41.6	67.6	91.5	82.8	89.1	89.5	89.4	85.6	72.4
TOTAL:	475.2	420.4	413.3	418.8	384.0	442.2	475.1	482.8	416.3

* = Excluding Sales to foreign bunkers on KNPC account by IOC.
P = Provisional.

ESTIMATED STATE-WISE CONSUMPTION OF BULK PETROLEUM PRODUCTS @ 1985-86

('000' Tonnes)

STATE/UNION TERRITORY	ATF	M.S	SKO	HSD	LDO	F.O-(Reg.)	LSHS	NAP-HTHA	LPG	BIT-UMEN	OTHER	TOTAL
1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.
A. STATE												
Andhra	40	132	417	1185	23	107	38	82	101	66	69	2260
Assam	53	43	207	262	8	49	19	3	21	50	42	757
Bihar	8	85	327	795	148	139	211	138	27	31	80	1989
Gujarat	39	186	581	1002	209	333	1444	590	98	89	197	4768
Haryana	23	51	114	526	31	197	120	Neg.	30	23	20	1135
Himachal Pradesh	--	9	26	64	Neg.	3	--	--	4	5	2	113
Jammu & Kashmir	10	23	62	96	5	3	--	--	5	10	5	219
Karnataka	35	139	329	797	19	140	38	124	59	18	35	1733
Kerala	28	124	188	485	9	83	111	163	28	50	53	1322
Madhya Pradesh	16	87	270	845	19	328	37	30	51	48	75	1806
Maharashtra	505	420	1103	1824	236	820	997	323	290	141	254	6915
Manipur	Neg.	6	16	14	Neg.	--	--	--	2	10	--	48
Meghalaya	--	9	13	35	Neg.	Neg.	--	--	2	2	--	61
Nagaland	--	8	8	14	--	1	--	--	1	2	2	36
Orissa	7	30	108	285	12	82	78	106	7	18	15	748
Punjab	53	131	233	929	15	236	353	--	44	34	34	2062
Rajasthan	47	73	187	795	18	75	10	164	30	71	28	1498
Sikkim	Neg.	4	5	4	Neg.	--	--	--	Neg.	1	--	14
Tamil Nadu	53	148	492	1543	51	338	372	460	127	83	75	3742
Tripura	2	3	14	17	Neg.	Neg.	--	--	1	3	3	43
Uttar Pradesh	58	179	688	1583	109	212	77	590	104	153	107	3860
West Bengal	90	115	573	878	134	358	66	85	56	81	273	2709
TOTAL (A)	1067	2005	5961	13978	1048	3514	3971	2858	1088	989	1359	37838
B. UNION TERRITORIES.												
A & N Islands	2	1	3	20	1	Neg.	--	--	--	--	1	28
Arunachal Pradesh	1	3	6	12	Neg.	--	--	--	Neg.	5	--	27
Chandigarh	15	14	16	33	4	4	3	--	9	36	4	138
Delhi	330	205	177	530	49	145	5	--	114	46	49	1650
Dadra & Nagar Haveli	--	Neg.	1	2	--	Neg.	--	--	Neg.	Neg.	--	3
Goa, Daman & Diu	15	13	22	88	5	103	Neg.	220	6	12	11	495
Lakshadweep	--	--	Neg.	1	--	Neg.	--	--	--	--	--	1
Mizoram	--	4	4	13	--	--	--	--	1	1	1	24
Pondicherry	--	6	11	46	2	4	--	Neg.	3	2	--	74
TOTAL (B)	363	246	240	745	61	256	8	220	134	102	65	2440
C. OUTSIDE TERRITORIES.												
Bhutan	Neg.	2	3	14	--	--	--	--	1	3	--	23
D. Adjustment (+)/(-)	+10	+11	-4	+1	-11	-45	+9	+50	+5	+24	+35	+85
GRAND TOTAL (A+B+C)	1440	2264	6200	14738	1098	3725	3988	3128	1228	1118	1459	40386

@ = Estimated on basis of data available for first 11 months of 1985-86 and include sales to bun and minor petroleum products.

Estimated State-wise per capita Sales/Consupmtion of POL Products (excluding International Bunkers).

(Kgs.)

State/ Territory	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86(P)
A. STATES							
Andhra Pradesh	33.7	33.3	32.7	34.3	36.2	37.7	38.8
Assam	23.0	26.6	27.0	28.4	27.6	31.5	33.7
Bihar	19.3	20.5	23.5	26.4	24.7	25.2	26.1
Gujarat	116.1	114.6	112.3	124.6	123.4	128.3	127.8
Haryana	59.1	64.7	78.7	76.9	77.0	82.0	80.0
Himachal Pradesh	19.1	19.9	19.8	19.5	20.9	23.3	24.7
Jammu & Kashmir	28.6	27.7	27.3	26.4	28.6	28.9	33.1
Karnataka	36.4	34.1	35.9	36.6	38.4	41.6	42.6
Kerala	43.0	44.9	44.4	43.3	44.3	48.3	48.5
Madhya Pradesh	20.5	21.6	23.0	25.4	28.1	30.0	31.7
Maharashtra	88.7	92.4	90.0	87.3	92.8	98.6	101.2
Manipur	22.5	29.2	32.6	33.3	42.3	32.5	30.6
Meghalaya	21.5	20.2	21.1	26.2	36.2	36.2	40.9
Nagaland	30.0	28.4	31.2	33.8	39.8	33.7	40.4
Orissa	20.1	20.5	24.4	23.6	22.2	24.9	26.5
Punjab	79.5	84.0	96.5	100.1	105.8	110.9	113.9
Rajasthan	31.7	31.8	33.2	35.8	34.9	38.2	39.4
Sikkim	32.4	36.7	25.8	27.6	27.3	28.1	38.9
Tamil Nadu	63.3	66.8	60.8	66.5	65.6	70.2	72.8
Tripura	11.1	13.1	17.1	17.5	15.2	17.9	18.8
Uttar Pradesh	23.1	23.1	26.7	28.9	29.0	32.4	31.8
West Bengal	36.2	39.8	41.6	42.0	45.4	47.1	45.1
B. OTHER AREAS							
Chandigarh	117.6	209.3	217.8	185.8	226.0	235.6	226.9
Delhi	184.4	187.6	188.4	195.0	208.2	219.7	214.9
Goa (incl. Daman & Diu Dadra & Ngr.Haveli)	416.7	290.6	401.8	414.8	368.1	368.0	375.6
Others	82.1	52.0	54.6	60.2	56.9	63.4	69.6
TOTAL ALL-INDIA @	47.9	48.2	49.5	52.0	52.8	35.9	57.5

Estimated per capita consumption of selected pertoleum products - 1979-80 to 1985-86 (incl. Bunkers).

PRODUCT	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86(P)
Naphtha	3.7	3.5	4.3	4.2	3.9	4.3	4.2
M.S.	2.3	2.3	2.3	2.5	2.6	2.9	3.0
SKO	5.9	6.3	6.9	7.5	7.7	8.2	8.3
HSDO	15.0	15.5	15.7	17.2	17.6	18.7	19.7
LDO	1.9	1.7	1.5	1.5	1.5	1.6	1.5
F.O. (Regular)	7.3	8.1	6.3	6.0	5.9	5.8	5.0
LSHS/HHS	3.5	3.1	4.2	4.4	4.7	5.1	5.3
TOTAL ALL-INDIA @ SALES CONSUMPTION	47.9	48.2	49.5	52.0	52.8	55.9	57.3

Note: i) Based on Expert Committee's popultion projections as on 1st March each year and projections on 1971 and 1981 Consus basis.

ii) Includes Mogas, Kerosene, ATF, HSDO, LDO, Fuel Oils, LPG, Naphtha and Bitumen in 1979-80 and all products except (lubricants) in 1980-81 to 1982-83 but incl. lubricants in 1983-84 to 1985-86.

@ = All-India actual consumption of all products incl. Ref. Fuel & International Bunkers.

P = Provisional.

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LP GAS NAPATHA & HSDO DURING 1983-84, 1984-85 & 1985-86.

(Qty. '000' Tonnes)

SECTOR	1983-84 Consumption	1983-84 % to Total	1984-85 Consumption	1984-85 % to Total	1985-86 (P) Consumption	1985-86 (P) % to Total
1.	2.	3.	4.	5.	6.	7.
		L. P. GAS:				
1. Domestic	660	88.5	854	89.6	111.3	90.6
2. Commercial/Industry	86	11.5	99	10.4	115	9.4
3. Others	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
TOTAL:	746	100.0	953	100.0	1228	100.0
		NAPHTHA.				
1. Fertilizers	2134	76.1	2365	75.7	2306	73.8
2. Petrochemicals	653	23.3	726	23.2	795	25.4
3. Others	17	0.6	34	1.1	27	0.8
TOTAL:	2804	100.0	3125	100.0	3128	100.0

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF HSDO, LDO FO & LSHS: 1983-84, 1984-85 & 1985-86.

(Qty. '000' Tonnes)

SECTOR	1983-84 Consumption	1983-84 % to Total	1984-85 Consumption	1984-85 % to Total	1985-86 (P) Consumption	1985-86 (P) % to Total
1.	2.	3.	4.	5.	6.	7.
		HSDO				
1. Transport:						
i) Railways	1105	8.8	1165	8.5	1207	8.2
ii) Water ways:						
a)Coastal & Inland Bunkers	86	0.7	87	0.6	98	0.7
b)International Bunkers	17	0.1	12	0.1	10	0.1
iii) Other transport incl.Agr. retail trade)	9841	78.1	10575	77.2	11422	77.5
Sub - TOTAL - 1.	11049	87.7	11839	86.4	12737	86.5
II.Plantation/Food (incl. processing)	119	0.9	128	1.0	145	1.0
III.Power Generation (Utilities)	145	1.2	140	1.0	157	1.1
IV. Industry						
i) Iron & Steel	53	0.4	59	0.4	72	0.5
ii)Textile & Fibre	189	1.5	168	1.2	251	1.7
iii)Cement	68	0.5	94	0.7	119	0.8
iv)Ceramics & Glass	8	0.1	13	0.1	13	0.1
v) Chemicals & Allied	65	0.5	61	0.5	80	0.5
vi)Aluminium	3	Neg.	4	Neg.	3	Neg.
vii)Sugar	38	0.3	35	0.3	36	0.2
viii)Mining & Quarrying	324	2.6	354	2.6	411	2.8
ix)Engg.(Mech. & Elec.)	111	0.9	112	0.8	134	0.9
x)Fertilizers	24	0.2	30	0.2	39	0.3
xi)Other Indrstries & Construction	88	0.7	192	1.4	187	1.2
Total IV	971	7.7	1122	8.2	1345	9.0
V. Misc. Services(incl.DGS&D)	316	2.5	467	3.4	354	2.4
GRAND TOTAL:	12600	100.0	13696	100.0	14738	100.0

P = Provisonal estimated on the basis of data available for first 11 month of 1985-86

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LDO & FO : 1983-84, 1984-85 & 1985-86.

(Qty. '000' Tonnes)

ITEM	1983-84 Consumption	1983-84 % to Total	1984-85 Consumption	1984-85 % to Total	1985-86 (P) Consumption	1985-86 (P) % to Total
1.	2.	3.	4.	5.	6.	7.
		L.D.O.				
I. Transport:						
i) Railways	5	0.5	6	0.5	7	0.6
ii) Water ways:						
a)Coastal & Inland Bunkers	47	4.3	49	4.1	40	3.7
b)International Bunkers	42	3.8	37	3.1	32	2.9
iii) Other transport (incl. Agr. retail trade)	8	0.7	3	0.2	2	0.2
Sub - TOTAL - 1:	102	9.3	95	7.9	81	7.4
II.Plantation/Food (incl. processing)	26	2.4	29	2.4	32	2.9
III.Power Generation (Utilities)	219	20.0	233	19.5	253	23.0
IV. Industry						
i) Iron & Steel	11	1.0	23	1.9	37	3.4
ii)Textile & Fibre	24	2.2	25	2.1	26	2.4
iii)Cement	3	0.3	11	0.9	11	1.0
iv)Ceramics & Glass	26	2.4	33	2.8	33	3.0
v)Chemicals & Allied	73	6.6	82	6.8	65	5.9
vi)Aluminium	1	0.1	2	0.2	1	0.1
vii)Sugar	4	0.4	3	0.3	3	0.3
viii)Mining & Quarrying	6	0.5	10	0.8	11	1.0
ix)Engg.(Mech. & Elec.)	79	7.2	92	7.7	100	9.1
x)Fertilizers	4	0.4	7	0.6	9	0.8
xi)Other Indrstries & Construction	68	6.2	89	7.4	90	8.2
Total IV	299	27.3	377	31.5	386	35.2
V. Misc. Services(incl.DGS&D)	451	41.0	464	38.7	346	31.5
TOTAL:	1097	100.0	1198	100.0	1098	100.0
		F.O. (Regular):				
I. Transport:						
i) Railways	52	1.2	51	1.2	44	1.2
ii) Water ways:						
a)Coastal & Inland Bunkers	142	3.4	143	3.4	169	4.5
b)International Bunkers	141	3.4	155	3.6	67	1.8
iii) Other transport (incl. Agr. retail trade)	51	1.2	8	0.2	11	0.3
Sub - TOTAL - 1:	386	9.2	357	8.4	291	7.8
II.Plantation/Food (incl. processing)	128	3.0	125	2.9	123	3.3
III.Power Generation(Utilities)	952	22.6	1032	24.3	793	21.3
IV Industry						
Iron & Steel	143	3.4	218	5.1	168	4.5
Textile & Fibre	263	6.3	231	5.4	228	6.1
Cement	32	0.8	46	1.1	38	1.0
Ceramics & Glass	132	3.0	106	2.5	83	2.2
Chemicals & Allied	568	13.5	554	13.0	483	13.0
Aluminium	80	1.9	106	2.5	62	1.7
Sugar	19	0.5	17	0.4	14	0.4

(P) = Provisional, estemated in the basis of data available for first 11 months of 1985-86.

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF FO & LSHS: 1983-84, 1984-85 & 1985-86.

(Qty. '000' Tonnes)

ITEM	1983-84		1984-85		1985-86 (P)	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total
1.	2.	3.	4.	5.	6.	7.
		FO (Regular)				
viii)Mining & Quarrying	39	0.9	78	1.9	55	1.5
ix)Engg.(Mech. & Elec.)	191	4.5	180	4.2	169	4.5
x)Fertilizers	574	13.7	553	13.0	494	13.2
xi)Other Indrstries & Construction	407	9.7	355	8.4	401	10.8
Total IV	2448	58.2	2444	57.5	2195	58.9
V.Misc. Services(incl.DGS&D)	293	7.0	298	7.0	323	8.7
Sub - TOTAL :	4207	100.0	4256	100.0	3725	100.0
		LSHS/HHS.				
I. Plantation/Food (incl. processing)	26	0.8	25	0.7	34	0.9
II.Power Generation(Utilit.)	1273	38.0	1462	39.6	1488	37.3
III.Industry						
3. Iron & Steel	193	5.8	203	5.5	229	5.7
4. Textile & Fibre	168	5.0	199	5.4	229	5.7
5. Cement	8	0.2	6	0.2	16	0.4
6. Ceramics & Glass	58	1.7	84	2.3	101	2.5
7. Chemicals & Allied	416	12.4	501	13.6	484	12.2
8. Aluminium	8	0.2	15	0.4	49	1.2
9. Mining & Quarrying	87	2.6	42	1.1	80	2.0
10.Engg.(Mech. & Elec.)	10	0.3	22	0.6	21	0.5
11.Fertilizers	913	27.3	911	24.7	1006	25.3
12.Other Indrstries & Construction	13	0.4	31	0.8	61	1.6
Total III	1874	55.9	2014	54.6	2276	57.1
IV.Misc. Services(incl.DGS&D)	178	5.3	186	5.1	190	4.7
TOTAL :	3351	100.0	3687	100.0	3988	100.0

GRADEWISE CONSUMPTION/SALES OF LUBES DURING 1983-84. 1984-85 & 1985-86.

(Qty.'000 Tonnes)

ITEM	1983-84 (R)		1984-85		1985-86 (P)	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total
1.	2.	3.	4.	5.	6.	7.
Total Lubes Oils of which:						
a) Automotive Oils:	332.7	56.3	355.5	56.0	343.2	52.8
HVI	332.7	56.3	355.5	56.0	343.2	52.8
MVI	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
LVI	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
b) Industrial Oils:	258.0	43.7	278.8	44.0	306.8	47.2
Total (a+b):	590.7	100.0	634.4	100.0	650.0	100.0
Industrial Oils-Break-up:						
1. Spindle Oils	4.9	1.9	4.9	1.9	5.4	1.8
2. Transformer Oil	0.4	0.2	0.4	0.1	0.5	0.2
3. Rly./Other axel Oils	9.9	3.8	6.7	2.4	9.0	2.9
4. Cylinder Oil	10.1	3.9	9.6	3.4	10.6	3.5
5. Turbine/Hydraulic Oil	53.6	20.8	64.6	23.2	71.1	23.2
6. Other Spl. Oils	70.7	27.4	95.7	34.3	105.3	34.2
7. Misc. grades	108.4	42.0	96.9	34.8	104.9	34.2
TOTAL :	258.0	100.0	278.8	100.0	306.8	100.0

P = Provisional estimated on the basis of data available for first 11 months of 1985-86.
R = Revised.

CONSUMPTION OF DIESEL OIL IN INDIAN RAILWAYS
DURING 1960-61 TO 1985-86.

Year	No. of Diesel Lecomotives Nos.	Consumption of Diesel Oil (In Kls.)	Consumption of Diesel per Loco-moive (In Kls.)
1.	2.	3.	4.
1960-61	181	62771	346.8
1961-62	228	59444	260.7
1962-63	349	98481	282.2
1963-64	486	182328	375.2
1964-65	621	245633	395.5
1965-66	727	310813	427.5
1966-67	776	365582	471.1
1967-68	892	427126	478.8
1968-69	996	486084	488.0
1969-70	1091	536301	491.6
1970-71	1169	569025	486.8
1971-72	1288	626983	486.8
1972-73	1431	667414	466.4
1973-74	1610	683140	424.3
1974-75	1702	720047	423.1
1975-76	1731	797610	460.8
1976-77	1903	867330	455.8
1977-78	2025	949077	468.7
1978-79	2126	960545	451.8
1979-80	2243	992060	442.3
1980-81	2403	1067477	444.2
1981-82	2515	1179682	469.1
1982-83	2520	1227236	468.1
1983-84	2805	1313200	468.2
1984-85	2905	1335664	459.8
1985-86*	3023	1440269	476.4

* = Provisional.

Source: Railways Board.

INDUSTRY/PLANT-WISE OFFTAKE ON NAPHTHA

(Qty.'000' Tonnes)

Category and Plant	Calendar Years				Financial Years			
	1982	1983	1984 (P)	1985 (P)	1982-83	1983-84	1984-85 (P)	1985-86 (P)
1.	2.	3.	4.	5.	6.	7.	8.	9.
I. Fertilizer Plants:								
Madras Fertilzer Ltd.	221	109	225	236	207	139	234	222
FCI, Durgapur	46	137	111	88	66	131	110	87
FCI, Gorakhpur	98	97	106	88	94	108	94	88
FCI, Sindri	26	--	--		--	--	--	--
FCI, Barauni	101	120	108	142	127	120	98	159
SFC, Kota	142	147	155	152	147	145	154	151
IEL, Kanpur	308	292	330	266	320	288	318	259
HSL, Rourkela	78	47	82	88	62	59	96	85
GSFC, Baroda	101	101	106	124	96	113	106	127
FACT, Cochin	126	100	134	87	113	110	124	90
ZAC, Goa	207	187	208	200	217	185	185	220
IFFCO, Phulpur	217	230	239	217	221	234	228	200
IFFCO, Kalol	54	43	53	55	54	41	57	47
IFFCO, Kandla	--	--	--	--	--	--	--	--
MCFL, Manglore	141	104	140	119	124	118	156	127
SPIC, Tuticorin	238	198	245	284	263	202	253	260
EID Parry Ltd.,Madras	6	Neg.	--	--	4	Neg.	--	--
GNFC, Bharuch	1	1	1	1	1	1	1	1
FACT, Alwaye	57	39	67	69	54	57	67	75
FCI, Bombay	55	7	--	--	45	--	--	--
Coromandal Forts.Vizag	72	76	81	77	66	83	77	85
Others	--	--	7	15	--	--	7	23
Sub-Total Fertilizer	2295	2035	2398	2308	2281	2134	2365	2306
II. Petrochemical Plants:								
BRPL,Bongaigaon	--	--	--	2	--	--	--	2
HCC, Rasayani	4	4	4	6	4	5	4	7
IPCL, Baroda	355	375	409	450	372	383	415	451
NOCIL, Bombay	197	189	235	250	200	187	233	246
FCI,Bombay(Mathanol)	16	16	13	20	16	16	14	19
UCIL, BOmbay	63	63	60	66	66	62	60	70
Sub-Total(Petro-Chem.)	635	647	721	796	658	653	726	795
III. Others:								
HSL, Bhilai etc.	14	14	34	22	19	17	34	27
Sub-Total(Others)	14	14	34	22	19	17	34	27
GRAND TOTAL: (I+II+III)	2944	2696	3153	3126	2958	2804	3125	3128

P = Provisional.

PLANT/CUSTOMER-WISE OFFTAKE OF LSHS/HHS.

(Qty. '000' Tonnes)

Category and Plant	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86(P)
1. Power:							
BPTS, Barauni	32.1	3.9	21.3	31.3	20.8	47.1	27.0
GEB, Gandhinagar	49.6	25.6	16.1	7.7	18.9	9.2	12.4
GEB, Kalol	1.3	--	--	--	--	--	--
GEB, Wanakbori	--	--	--	--	--	--	25.2
GEB, Ukai	86.9	82.7	66.6	76.8	49.8	70.5	65.0
GMTP, Bhatinda	--	--	--	2.7	--	--	--
DPH, Dhuwaran	633.6	616.6	624.5	675.6	636.7	637.0	659.1
DTPS, Durgapur	--	--	1.3	--	--	--	--
OTPS, Obra	--	--	--	5.3	13.9	2.5	--
TTP, Tuticorin	--	--	--	5.2	41.8	13.5	--
Tata Thermal Bombay	601.3	397.6	382.1	348.7	394.3	568.3	615.2
AEC, Ahmedabad	57.3	29.1	23.6	15.3	21.9	28.4	18.0
ASEB, Chandrapur	26.3	26.5	--	13.9	26.4	24.6	19.0
ASEB, Gauhati	--	--	--	--	7.3	--	--
MSEB, Koradi	--	--	--	--	--	--	--
MSEB, Uran	--	--	--	--	4.0	--	--
MSEB, Nasik	--	--	--	--	37.6	40.6	32.2
NLC, Neyveli	--	--	--	8.4	--	--	--
ETP, Ennore	--	--	--	--	--	13.7	8.2
Others	--	--	--	--	--	6.7	--
Sub-Total-1:	1488.4	1182.0	1135.5	1190.9	1273.4	1462.1	1487.5
2. FERTILIZER/PETRO-CHEMICALS							
NFL, Nangal	113.2	120.8	202.3	188.8	172.1	181.9	193.6
NFL, Bhatinda	8.7	70.7	146.1	203.2	102.9	157.9	143.0
NFL, Panipat	--	30.4	182.0	234.0	145.8	104.2	95.8
HFC, Barauni	7.6	0.7	12.3	17.1	21.5	15.6	22.8
FCI, Sindri	31.1	14.8	26.2	178.6	174.4	176.9	94.4
FCI, Talchar	--	--	--	--	1.5	13.8	19.6
IFFCO, Phulpur	--	--	1.1	8.8	17.6	29.6	41.3
IFFCO, Kalol	31.5	41.4	41.3	44.7	40.8	45.9	32.0
IPCL, Baroda(GA & GO)	87.6	100.3	152.9	191.0	166.4	221.8	234.6
GSFC, Baroda/Bajuwa	20.0	33.0	73.7	69.6	78.9	64.6	79.3
GNFC, Bharuch	--	1.4	16.3	29.1	164.7	184.2	232.1
FACT, Cochin	51.9	64.4	66.3	69.6	60.5	56.0	52.1
HOC, Rasayani	4.8	15.0	0.9	11.7	10.0	11.1	6.1
Petrochem-Bongaigaon	--	--	--	0.5	--	--	--
NOCIL, Bombay	--	--	--	28.8	29.6	16.0	14.7
SPIC, Tuticorin	--	--	--	27.9	33.8	53.2	117.9
MRL/MFL, Madras	--	--	--	15.7	27.7	48.0	65.6
NLC, Neyeli	--	--	--	--	71.2	37.6	69.9
Corom. Fert. Vizag	--	--	--	--	--	27.3	26.9
Others Misc.	--	--	--	--	68.6	50.1	1.5
Sub-Total-2:	356.4	492.9	921.4	1319.1	1388.0	1495.7	1543.2
3. STEEL PLATS:							
TISCO, Jamshedpur	62.1	19.5	62.5	61.0	57.0	59.9	58.9
RSP, Rourkela	83.0	7.1	71.3	90.0	50.4	62.2	57.8
DSP, Durgapur	96.2	24.0	221.7	109.0	83.8	76.4	78.7
HSL, Bhilai	--	--	--	--	--	4.5	33.2
Sub-Total-3:	241.3	50.6	355.5	260.0	193.2	203.0	228.6
4. GENERAL TRADE:	198.3	342.0	466.0	323.7	496.0	526.6	728.7
GRADE TOTAL:	2284.4	2067.5	2878.4	3093.6	3350.6	3687.4	3988.0

P = Provisional.

STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA 1983-84.

(Provisional)

STATE.	Gas Station		Diesel Stations		
	Natural Gas @ (Mn.cubic Metres)	Generation (GWH)	Diesel Oil (KL)	Generation (GWH)	Average Oil Consumption (Lts/KWH)
1.	2.	3.	4.	5.	6.
Assam	241.66	533.03	--	--	--
Bihar	--	--	289	0.75	0.38
Gujarat	--	--	42	0.09	0.47
Himachal Pradesh	--	--	27	0.04	0.68
Jammu & Kashmir			--	--	--
Manipur			3086	8.82	0.35
Meghalaya			--	--	--
Nagaland			85	0.17	0.50
Punjab			--	--	--
Rajasthan			28	0.06	0.47
Sikkim			39(E)	0.11	0.50
Tripura			455	1.30	0.35
Uttar Pradesh			--	--	--
West Bengal	32056(Oil)	71.14	1313	4.01	0.33
Maharashtra	554.95	1594.52	--	--	--
Other Stations					
UNION TERRITORIES:					
A & N Islands			4745	13.83	0.34
Arunachal Pradesh			868(E)	3.10	0.28
Chandigarh			35(E)	0.09	0.39
Lakshdweep			1353	3.04	0.45
Delhi			35	0.09	0.39
Mizoram			2643(E)	7.55	0.35
All India Total :	796.01 +32056(Oil)	2198.69	15043	43.05	0.35

(e) = Estimated (R) = Revised

@ = Figures relating to LDO, FO & LSHS are in Kilo Litres.

SOURCE: Directorate of Central Electricity Authority.

STATEWISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 1983-84.

(Provisional)

STATE	Fuel Consumption in Steam Power Stations						Heat Input	Gross Generation	Average Heat Input
	Coal ('000' (Tonnes)	Lignite '000' (Tonnes)	FO '000' (KL)	LDO '000' (KL)	LSHS '000' (MT)	Natural Gas (MCM)	(K.Cal. x10)	(GWK)	(K.Cal./KWH)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Andhra Pradesh	4369		43	6			16823.68	5909.30	2847
Assam	131		19	2.	35	21938.15	1697.73	434.67	3906
Bihar	1828		32	29	28		8456.42	2271.42	3723
Gujarat	4738		861	10	92	2193.15	33397.92	10907.65	3062
J & K	3		21				21.58	3.05	7075
Haryana	891		40	16			4618.67	1135.58	406
Madhya Pradesh	6644		194	16			25404.73	8435.65	3012
Maharashtra	7736		498	34	42	220	39730.98	14139.60	2810
Orissa	1036		11	2			4131.52	1268.62	3257
Punjab	1821		21	5			7287.2	2203.98	3306
Rajasthan	464		12	24			2245.93	695.07	2891
Tamil Nadu	2685		145	7	45		12792.56	3980.87	3214
Uttar Pradesh	6154		70	55			29258.42	7663.13	3818
West Bengal	4088		14	81			21896.05	6110.48	3583
Central Govt	29300	5518		22			37286.47	11868.65	9702
Project DVC	4375		53	59			20970.74	6104.06	3436
Union Territories									
A & N Islands		8		-			30.9	0.52	59538
Delhi	881		29	2			4235.00	1302.99	3250
GRAND TOTAL:	58028	5526	2178	370	172	22158.15	270286.93	84435.29	3198

(a) Wood Fuel / (b) Refinery Gas in Metric Tonnes.
Source:- Directorate of Central Electricity Authority.

XI. FOREIGN TRADE

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1970 to 1985

(Qty.'000'Tonnes Value:Rs.Crores)

Year	Crude Oil		Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
			GROSS IMPORTS			
1970	11665	102.36	970	30.53	12635	132.89
1971	12688	139.88	1932	43.49	14620	183.37
1972	12310	144.25	3257	56.69	15567	200.94
1973	13443	244.56	3735	88.03	17178	332.59
1974	13973	899.36	2949	209.90	16922	1109.26
1975	13600	992.02	2291	199.46	15891	1191.48
1976	13883	1145.56	2293	219.70	16176	1365.26
1977	14548	1258.92	2664	272.99	17212	1531.91
1978	14892	1243.89	3916	414.13	18808	1658.02
1979	15382	1787.38	4019	727.56	19401	2514.94
1980	15976	3038.66	6800	1788.28	22776	4826.94
1981	15528	3793.83	5697	1638.58	21225	5432.41
1982	17327	4116.89	4942	1551.37	22269	5668.26
1983	15552	3471.47	4260	1246.60	19812	4718.07
1984	14620	3525.15	6043	1850.31	20663	5375.46
1985(P)	14811	3808.74	4292	1440.70	19103	5249.44
			EXPORTS			
1970	--	--	412	5.72	412	5.72
1971	--	--	152	2.55	152	2.55
1972	--	--	109	8.94	109	8.94
1973	18	0.42	155	5.35	173	5.77
1974	--	--	202	19.37	202	19.37
1975	--	--	166	13.83	166	13.83
1976	--	--	82	7.60	82	7.60
1977	--	--	59	6.50	59	6.50
1978	--	--	43	4.20	43	4.20
1979	--	--	59	14.94	59	14.94
1980	--	--	70	17.98	70	17.98
1981	--	--	55	15.13	55	15.13
1982	4391	1044.71	648	101.23	5039	1145.94
1983	4723	1041.87	1148	286.64	5871	1328.51
1984	6760	1598.55	1071	271.63	7831	1870.18
1985(P)	2044	503.88	1695	482.06	3739	985.94
			NET IMPORTS			
1970	11665	102.36	558	24.81	12223	127.17
1971	12688	139.88	1780	40.94	14468	180.82
1972	12310	144.25	3148	47.75	15458	192.00
1973	13425	244.14	3580	82.68	17005	326.82
1974	13973	899.36	2747	190.53	16720	1089.89
1975	13600	992.02	2125	185.63	15725	1177.65
1976	13883	1145.56	2211	212.10	16094	1357.66
1977	14548	1258.92	2605	266.49	17153	1525.41
1978	14892	1243.89	3873	409.93	18765	1653.82
1979	15382	1787.38	3960	712.62	19342	2500.00
1980	15976	3038.66	6730	1770.30	22706	4808.96
1981	15528	3793.83	5642	1623.45	21170	5417.28
1982	12936	3072.18	4294	1450.14	17230	4522.32
1983	10829	2429.60	3112	959.96	13941	3389.56
1984	7860	1926.60	4972	1578.68	12832	3505.28
1985(P)	12767	3304.86	2597	958.64	15364	4263.50

(P) Provisional

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS
1970-71 TO 1985-86

(Qty.'000' Tonnes Value: Rs.Crores)

Year	Crude Oil		Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7
			GROSS IMPORTS			
1970-71	11683	106.72	1084	29.91	12767	136.63
1971-72	12951	147.02	2147	46.88	15098	193.90
1972-73	12084	146.37	3525	60.58	15609	206.95
1973-74	13873	416.39	3548	124.50	17421	540.89
1974-75	14016	916.99	2648	195.00	16664	1111.99
1975-76	13624	1051.76	2218	204.34	15842	1256.10
1976-77	14048	1175.91	2624	248.23	16672	1424.14
1977-78	14507	1246.20	2879	305.34	17386	1551.54
1978-79	14657	1251.17	3878	429.99	18535	1681.16
1979-80	16121	2187.53	4724	1082.39	20845	3269.92
1980-81	16248	3348.97	7289	1917.52	23537	5266.49
1981-82	15298	3736.38	4884	1453.16	20182	5189.54
1982-83	16949	4043.74	5028	1553.94	21977	5597.68
1983-84	15967	3541.05	4328	1270.75	20295	4811.80
1984-85	13642	3430.34	6092	1914.91	19734	5345.25
1985-86(P)	15144	3686.80	3865	1273.60	19009	4960.40
			EXPORTS			
1970-71	--	--	332	4.67	332	4.67
1971-72	--	--	136	3.91	136	3.91
1972-73	--	--	126	8.16	126	8.16
1973-74	18	0.42	161	8.05	179	8.47
1974-75	--	--	175	17.46	175	17.46
1975-76	--	--	170	13.96	170	13.96
1976-77	--	--	74	6.89	74	6.89
1977-78	--	--	47	5.69	47	5.69
1978-79	--	--	44	4.11	44	4.11
1979-80	--	--	88	24.02	88	24.02
1980-81	--	--	36	8.41	36	8.41
1981-82	838	196.23	55	15.13	893	211.36
1982-83	4552	1063.37	795	133.79	5347	1197.16
1983-84	5522	1231.10	1472	356.96	6994	1588.06
1984-85	6478	1563.16	933	255.03	7411	1818.19
1985-86(P)	528	135.15	1963	509.57	2491	644.72
			NET IMPORTS			
1970-71	11683	106.72	752	25.24	12435	131.96
1971-72	12951	147.02	2011	42.97	14962	189.99
1972-73	12084	146.37	3399	52.42	15483	198.79
1973-74	13855	415.97	3387	116.45	17242	532.42
1974-75	14016	916.99	2473	177.54	16489	1094.53
1975-76	13624	1051.76	2048	190.38	15672	1242.14
1976-77	14048	1175.91	2550	241.34	16598	1417.25
1977-78	14507	1246.20	2832	299.65	17339	1545.85
1978-79	14657	1251.17	3834	425.88	18491	1677.05
1979-80	16121	2187.53	4636	1058.37	20757	3245.90
1980-81	16248	3348.97	7253	1909.11	23501	5258.08
1981-82	14460	3540.15	4829	1438.03	19289	4978.18
1982-83	12397	2980.37	4233	1420.15	16630	4400.52
1983-84	10445	2309.95	2856	913.79	13301	3223.74
1984-85	7164	1867.18	5159	1659.88	12323	3527.06
1985-86(P)	14616	3551.65	1902	764.03	16518	4315.68

P = Provisional.

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1983 TO 1985

(Qty.'000'Tonnes Value:Rs.Crores)

ITEM	1983 Qty.	1983 Value	1984 Qty.	1984 Value	1985(P) Qty.	1985(P) Value
GROSS IMPORTS						
A. Crude Oil	15552	3471.47	14620	3525.15	14811	3808.74
B. Petroleum Products						
I. Light Distillates	123	44.69	386	118.11	175	57.45
1. Naphtha	77	22.66	290	83.68	100	30.42
2. Others	46	22.03	96	34.43	75	27.03
II. Middle Distillates	4033	1144.90	5342	1620.23	3913	1275.03
1. ATF	223	67.13	103	35.22	121	40.25
2. SKO	1875	554.45	2697	851.72	2466	824.41
3. HSDO	1913	518.10	2521	727.71	1326	410.37
4. LDO	22	5.22	21	5.58	--	--
III. Heavy Ends	104	57.01	315	111.97	204	108.22
1. FO	--	---	175	39.02	20	4.39
2. Lubes	100	55.92	128	69.77	184	103.75
3. Waxes	--	---	Neg.	Neg	Neg.	0.08
4. Others	4	1.09	12	3.18	--	--
Total (B)	4260	1246.60	6043	1850.31	4292	1440.70
Grand Total(A+B)	19812	4718.07	20663	5375.46	19103	5249.44
EXPORTS @						
A. Crude Oil	4723	1041.87	6760	1598.55	2044	503.88
B. Petroleum Products						
I. Light distillates	818	217.60	626	170.06	1448	410.58
1. Naphtha	809	214.01	612	164.68	1433	404.19
2. Others	9	3.59	14	5.38	15	6.39
II. Middle Distillates	78	26.90	127	43.99	128	46.55
1. HSD/LDO	39	13.01	69	22.93	67	22.81
2. Others	39	13.89	58	21.06	61	23.74
III. Heavy Ends	252	42.14	318	57.58	119	24.93
1. FO	246	40.42	314	55.78	110	21.97
2. Others	6	1.72	4	1.80	9	2.96
Total (B)	1148	286.64	1071	271.63	1695	482.06
Grand Total(A+B)	5871	1328.51	7831	1870.18	3739	985.94
NET IMPORTS						
A. Crude Oil	10829	2429.60	7860	1926.60	12767	3304.86
B. Petroleum Prod.	3112	959.96	4972	1578.68	2597	958.64
Total (Net Imports)	13941	3389.56	12832	3505.28	15364	4263.50

@ = Includes supplies of POL Products to Nepal w.e.f. 1.4.83 onwards.
P = Provisional.

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1983-84 TO 1985-86

(Qty. '000 Tonnes Value:Rs.Crores)

ITEM	1983-84 Qty.	1983-84 Value	1984-85 Qty.	1984-85 Value	1985-86(P) Qty.	1985-86(P) Value
GROSS IMPORTS						
A. Crude Oil	15967	3541.05	13642	3430.34	15144	3686.80
B. Petroleum Products						
I. Light Distillates	172	57.67	470	147.03	38	13.90
1. Naphtha	129	37.34	338	99.42	--	--
2. Others	43	20.33	132	47.61	38	13.90
II. Middle Distillates	4047	1154.92	5312	1652.80	3608	1147.27
1. ATF	169	50.63	128	44.47	150	45.84
2. SKO	2030	603.64	2611	844.77	2568	844.41
3. HSDO	1806	489.85	2573	763.56	890	257.02
4. LDO	42	10.80	---	---	--	--
III. Heavy Ends	109	58.16	310	115.08	219	112.43
1. FO	--	---	175	39.02	20	4.39
2. Lubes	97	54.98	135	76.00	195	105.10
3. Waxes	--	--	0.03Neg.	0.06	4	2.94
4. Others	12	3.18	---	---	--	--
Total (B)	4328	1270.75	6092	1914.91	3865	1273.60
Grand Total(A+B)	20295	4811.80	19734	5345.25	19009	4960.40
EXPORTS @						
A. Crude Oil	5522	1231.10	6478	1563.16	528	135.15
B. Petroleum Products						
I. Light distillates	914	242.30	626	173.16	1812	455.21
1. Naphtha	901	237.64	612	167.48	1796	448.52
2. Others	13	4.66	14	5.68	16	6.69
II. Middle Distillat	110	37.90	132	45.99	130	48.05
1. HSD/LSHS	57	19.12	71	23.53	66	23.19
2. Others	53	18.78	61	22.46	64	24.86
III. Heavy Ends	448	76.76	175	35.88	21	6.31
1. FO/LSHS	440	74.03	170	33.75	14	3.81
2. Others	8	2.73	5	2.13	7	2.50
Total (B)	1472	356.96	933	255.03	1963	509.57
Grand Total(A+B)	6994	1588.06	7411	1818.19	2491	644.72
NET IMPORTS						
A. Crude Oil	10445	2309.95	7164	1867.18	14616	3551.65
B. Petroleum Prod.	2856	913.79	5159	1659.88	1902	764.03
Total (Net Imports)	13301	3223.74	12323	3527.06	16518	4315.68

@ = Includes supplies of POL Products to Nepal.
P = Provisional.

TREND IN INDIA'S OVERALL TRADE BALANCE AND TRADE BALANCE WITH OPEC COUNTRIES

(Rs./Crores)

Year	India's Overall Trade					India's Trade with OPEC Countries					% of India's trade with OPEC to India's total Trade	
	Exports	Imports	Balance of Trade	% Variation Over Preceding Year		Exports	Imports	Balance of Trade	% variation over proceding year			
				Exports	Imports				Exports	Imports	Exports	Imports
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1970-71	1535	1634	-99	8.6	3.3	99	126	-27	-	-	6.4	7.7
1971-72	1608	1825	-217	4.8	11.3	76	182	-106	-23.2	44.4	4.7	10.7
1972-73	1971	1867	+104	22.6	2.3	94	200	-106	23.7	9.9	4.8	10.0
1973-74	2583	2955	-432	28.0	58.3	187	532	-345	98.9	166.0	7.4	18.0
1974-75	3329	4519	-1188	32.0	52.9	467	1100	-633	149.7	106.8	14.0	24.3
1975-76	4036	5265	-1229	21.2	16.5	633	1166	533	35.6	6.0	15.7	22.1
1976-77	5142	5074	+72	27.4	-3.6	707	1296	589	11.7	11.2	13.8	25.5
1977-78	5408	6020	-612	5.2	18.6	674	1340	666	4.7	3.4	12.5	22.3
1978-79	5726	6811	-1085	5.9	13.1	733	1382	649	8.8	3.1	12.8	20.3
1979-80	6418	9143	-2725	12.1	34.2	717	2410	1693	2.2	74.4	11.2	26.4
1980-81	6711	12549	-5838	3.9	37.3	745	3489	-2744	3.9	62.1	11.1	27.8
1981-82	7806	13608	-5802	16.3	8.4	899	3790	-2891	20.7	8.6	11.5	27.9
1982-83	8803	14307	-5504	12.8	5.1	858	3916	-3058	-4.6	3.3	9.7	27.4
1983-84	9872	15763	-5891	12.1	10.2	749	2941	-2192	-12.7	24.9	7.6	18.7
1984-85	11297	16485	-5188	14.3	4.3	641	2397	-1756	-14.5	-18.5	5.7	14.5
1985-86	10420	18371	-7951	(-)7.8	11.4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

* = Provisional.

Source = Ministry of Commerce/Economic Survey.

INDIA'S FOREIGN EXCHANGE RESERVES. (1970-71 TO 1985-86)

Year	S.D.R.S. Million	GOLD (Rs.Crores)	Foreign Exchange (Rs. Crores)
1.	2.	3.	4.
1970-71	148.9	182.53	438.12
1971-72	247.7	182.53	480.38
1972-73	246.5	182.53	478.90
1973-74	244.9	182.53	580.78
1974-75	234.9	182.53	610.50
1975-76	202.8	182.53	1491.70
1976-77	187.4	187.80	2862.99
1977-78	161.6	193.09	4499.75
1978-79	364.9	219.50	5219.86
1979-80	529.1	224.71	5163.66
1980-81	490.5	225.58	4822.12
1981-82	425.1	225.58	3354.47
1982-83	070.2	225.58	4265.26
1983-84	216.4	225.58	5497.9
1984-85	146.5	245.76	6816.78
1985-86*	115.1	274.28	7384.35

SOURCE : Economic Survey/M.O.Finance * = Provisional

INDIA'S POL IMPORTS AS A PROPORTION TO OVERALL EXPORTS FROM THE COUNTRY 1970-71 TO 1985-86.

Rs./Crores

Y E A R	POL Imports		India's Total Exports		Gross POL Imports as %age of total gross Exports	Net POL Imports as %age of total net Exports
	Gross	Net	Gross	Net of POL Exports		
1.	2.	3.	4.	5.	6.	7.
1970-71	137	132	1535	1530	8.9	8.6
1971-72	194	190	1608	1604	12.1	11.8
1972-73	207	199	1971	1963	10.5	10.1
1973-74	541	532	2523	2514	21.4	21.2
1974-75	1112	1095	3329	3312	33.4	33.1
1975-76	1256	1242	4036	4022	31.1	30.9
1976-77	1424	1417	5142	5135	27.7	27.6
1977-78	1552	1545	5408	5393	28.7	28.6
1978-79	1681	1677	5726	5722	29.4	29.3
1979-80	3270	3246	6418	6394	51.0	50.8
1980-81	5266	5258	6711	6703	78.5	78.4
1981-82	5190	4978	7806	7594	66.5	65.6
1982-83	5598	4401	8803	7606	63.6	57.9
1983-84	4812	3224	9872	8284	48.7	38.9
1984-85	5345	3527	11297	9479	47.3	37.2
1985-86(P)	4960	4316	10420	9776	47.6	44.1

SOURCE : For Column 4 :- Ministry of Commarce DGCI&S,Calcutta. * = Provisional

XII. MAN-POWER EMPLOYED.

DIRECT EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1982	1983	1984	1985	1986
1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Exploration & Production	26051	27067	31413	36089	43535	48700	52041	52041
2. Refining*	10715	12327	15334	18359	19507	20885	23074	23247
3. Marketing	20362	19072	19920	22858	24468	26490	27717	27814
4. Others:-								
1. IOC(Pipeline)	487	724	1312	1445	1592	1767	1819	1848
2. ONGC(Pipeline)	346	233	411	203	280	391	496	450
3. OIL(Pipeline)	443	431	492	490	538	539	586	599
4. I.I.P.	588	676	754	744	744	767	778	763
5. E.I.L.	N.A.	1940	2661	3176	3422	3558	3702	3597
TOTAL	1864	4004	5630	6058	6576	7022	7381	7257
GRAND TOTAL	58992	62470	72297	83364	88614	97932	106872	110359

CATEGORY-WISE DIRECT EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1982	1983	1984	1985	1986
1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Executive/ Managerial	4793	6461	9311	13027	15666	18620	21108	23956
2. Supervisory	6205	6659	6512	7388	8221	9299	10432	10696
3. Clerical	11457	11723	12403	13921	13626	14698	15878	16549
4. Workmen	36437	37611	44057	48969	51023	55175	59313	59158
5. TOTAL	58892	62454	72283	83305	88536	97792	106731	110359
6. Expatriates/ Foreign Experts	100	16	14	59	78	140	141	---
GRAND TOTAL	58992	62470	72297	83364	88614	97932	106872	110359

Note :- 1. Staff Employed as on 1st April of each year.
2. Total does not include staff Employed on contract basis.

CATEGORY-WISE DIRECT EMPLOYED @ IN VARIOUS SECTOR OF PETROLEUM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1982	1983	1984	1985	1986*
1.	2.	3.	4.	5.	6.	7.	8.	9.
EXPLORATION AND PRODUCTION								
1. Executive/ Managerial	1765	1967	3394	4896	6796	8450	10183	12166
2. Supervisory	2774	3538	1994	3068	3191	4104	4537	4297
3. Clerical	3764	3538	3795	4405	3930	4526	5438	5000
4. Workmen	17704	18013	22216	23683	24068	26215	28401	30578
5. TOTAL	26007	27056	31399	36052	37985	43395	48559	52041
6. Expatriates/ Foreign Experts	44	11	14	37	78	140	141	---
GRAND TOTAL	26051	27067	31413	36089	38063	43535	48700	52041
PETROLUEM REFINING*								
1. Executive/ Managerial	258	818	2055	2825	2892	3700	3878	4442
2. Supervisory	1076	1313	1050	956	1409	1162	1648	902
3. Clerical	1219	1568	1791	2277	2344	2540	2728	2747
4. Workmen	7857	8626	10438	12279	12862	13483	14820	15156
5. TOTAL	10677	12325	15334	18337	19507	20885	23074	23247
6. Expatriates/ Foreign Experts	38	2	----	22	----	----	---	----
GRAND TOTAL	10745	12327	15334	18359	19507	20885	23074	23247
MARKETING								
1. Executive/ Managerial	2367	3519	3318	4632	5203	5599	6047	6232
2. Supervisory	2081	910	1591	1049	1145	1384	1441	2816
3. Clerical	6220	5870	5820	6183	6350	6488	6533	7607
4. Workmen	9680	8770	9191	10994	17770	13019	13696	11159
5. TOTAL	20348	19069	19920	22858	24468	26490	27717	27814
6. Expatriates/ Foreign Experts	14	3	----	----	----	----	----	----
GRAND TOTAL	20362	19072	19920	22858	24468	26490	27717	27814

@ = Data relates to the number of person directly employed by various oil companies as on 1st April of each year. Staff Employed on contract basis is not covered.

* = Includes IOC's Head Office, Regional office and R & D Centre.

XIII. PRICES

WHOLESALE PRICE INDICES OF Petroleum Products, Petro-based Industries & other Energy Items (1970-71 = 100)

Items	1972-73	1973-74	1979-80	1980-81	1981-82	1983-84	1984-85*	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(7)
			I. Petroleum Products					
Petrol	121.6	178.6	361.3	430.7	505.5	522.6	531.3	612.2
Diesel Oil	105.9	119.5	186.5	279.6	373.3	414.9	415.8	440.2
L.D.O.	107.8	122.0	329.8	548.1	732.5	800.1	812.3	929.3
Kerosene	114.9	113.1	266.1	277.3	315.9	343.0	347.2	386.7
F.O.	113.3	150.7	529.9	880.1	1148.5	1228.1	1234.2	1412.5
Aviation Spirit	125.4	173.9	431.7	581.8	589.6	593.4	601.1	688.9
Petroleum Crude & Natural Gas	142.0	317.1	1384.0	2041.8	2130.7	1739.5	1739.2	1752.1
			II. Petro-Based Industries					
Lubricating Oil	99.0	135.8	319.6	373.6	416.1	464.4	466.4	525.8
Nylon & Terene	98.9	104.7	131.6	139.7	147.9	155.4	158.4	161.6
Mixed cloth								
Benzene	106.1	125.7	480.3	709.0	758.4	769.5	772.4	855.3
Nitrogenous Fertilizers	104.7	109.5	171.7	254.7	281.0	277.0	275.1	279.8
Insecticides	111.6	131.6	272.2	328.6	351.8	425.9	430.6	441.8
Syn. Detergents	105.2	105.7	230.5	274.8	294.2	297.3	297.3	308.0
Polystyrene	101.0	121.8	349.8	425.8	464.8	425.1	458.9	511.1
Polyethylene Moulding Powder	105.4	122.8	228.9	291.9	303.7	276.9	291.3	525.9
PVC Compounds	104.3	132.2	222.6	309.1	323.3	323.3	323.9	341.9
PVC Sheets	98.2	129.8	196.0	224.9	228.4	231.7	338.5	271.3
Syn. Resins(nes)	99.8	121.3	199.8	219.0	232.5	275.7	269.1	267.6
Syn. Fibre	101.4	106.2	150.2	157.4	167.5	169.8	173.8	158.4
Syn. Rubber	100.0	100.0	138.3	174.4	190.1	201.2	224.1	252.6
Polythene films	108.8	131.2	248.6	296.7	301.9	301.9	301.9	301.9
Carbon black	99.6	99.6	347.4	532.7	664.0	678.6	689.3	826.4
Plasticizers	104.6	103.1	269.5	314.9	310.9	320.1	346.1	410.7
			III. Other Energy Items					
Electricity	105.7	111.3	255.6	239.0	279.6	387.7	414.1	486.1
Coke	134.7	136.4	262.8	291.7	382.8	489.1	575.2	582.3
Coal	110.8	121.7	299.5	347.6	432.1	542.3	641.9	662.2
Lignite	116.6	130.5	176.9	232.0	273.4	370.8	498.3	520.5
			IV. All commodity Index					
All commodities	116.2	139.7	217.6	257.3	281.3	316.0	338.4	357.8

Source: Monthly Bulletins of Index Numbers of Wholesale Price Indices brought out by the office of the Economic Adviser, Ministry of Industry.

* = Provisional.

Prices of Indigenous Onshore and Offshore Crude Oil in India.
34° API Gravity

Item	Unit	Price effective from					
		14.7.75	8.9.76	16.12.77	1.4.81	11.7.81	15.2.83
				(i) Onshore Crude Oil			
1. Base Price (as fixed by the Govt)	Rs/Bbl.	36.64*	33.30*	27.60	27.60	138.54	138.54
2. Conversion factor	Bbl./MT	7.37	7.37	7.37	7.37	7.37	7.37
3. Base Price	Rs/MT	**270.04	**245.42	203.41	203.41	1021.00	1021.00
4. Oil Development Cess	Rs/MT	@	60.00	60.00	60.00	100.00	300.00
5. Royalty	Rs/MT	@	@	42.00	61.00	61.00#	61.00#
6. Total Price (including Cess & Royalty)	Rs/MT	270.04	305.41	305.41	324.41	1182.00#	1382.00#
				(ii) Offshore Curde Oil			
1. Base Price as fixed by the Govt.	Rs/Bbl.			45.00	45.00	138.54	138.54
2. Conversion factor	Bbl/MT			7.37	7.37	7.37	7.37
3. Base Price	Rs/MT			331.65	331.65	1021.00	1021.00
4. Oil Development Cess	Rs/MT			60.00	60.00	100.00	300.00
5. Royalty	Rs/MT			42.00	61.00	61.00	61.00
6. Total Price (including Cess & Royalty)	Rs/MT			433.65	452.65	1182.00#	1382.00#

* Inclusive of royalty @ Rs. 15/MT and Oil Development Cess @ Rs. 60/MT
** Inclusive of royalty @ Rs. 42/MT
@ included in the base price
Shows price fixed by the Government inclusive of royalty and Oil Development Cess.

Note: 1. The above prices are for 34 API gravity crude oil Ex central tank farm of the producer and are subject to gravity escalation @ Rs. 0.16 per degree API upto 45° API, no limit for downward escalation has been laid down.

2. The prices are inclusive of sales tax which is the liability of the Producer.

DEVELOPMENT OF BASIC CEILING SELLING PRICES OF PETROLEUM PRODUCTS (EX-STORAGE POINT BOMBAY) SINCE 17.8.1979.

(Rs./Selling Unit)

PRODUCT	Selling Unit	Prior to 17.8. 1979	EFFECTIVE DATE 17.8. 1979	8.6. 1980	13.1. 1981	11.7. 1981	18.3. 1983	17.3. 1985	1.2. 1986	6.2. 1986
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ATF	KL	1377	2117	3217	3537	3872	4122	4740	5240	5240
MS 83/87	"	3538	3888	4538	4908	5438	5438@	6369	6869	6769
MS 93	"	3693	4043	4693	5063	5593	5593	6424	6924	6824
HSDO	"	1209	1310	1960	2330	2650	2850	3008#	3188	3116
SKO	"	1194	1295	1295	1395	1545	1645	1822#	2047	1957
LDO	"	807	1207	1857	2227	2506	2656	3054	3054	3054
Furnace Oil:										
For non-ferts.	"	889	1209	1859	2189	2424	2524	2903	2903	2903
For ferts.	"	---	829	829	1039	1274	1274	+1320	1320	1320
Bitumen St-Gr.										
Bulk	MT	676	1176	1826	2061	2323	2196	2524	2524	2524
Packed	"	961	1461	2111	2345	2608	2696	3100	3100	3100
Naphtha:										
For non-ferts.*	"	1012	2482	2692	2792	2792	2792	3211	3211	3211
For ferts.*	"	596	596	1071	1371	1723	1723	1982	1982	1982
JBO*	"	789	989	1679	1999	2358	2358	2712	2712	2712
SBP Spirit:										
64/69*	KL	1111	1861	2961	3331	3629	3629	4173	4173	4173
Hexane*	"	1111	1861	2961	3331	3629	3629	4173	4173	4173
MTO 140/205*	"	762	1124	1774	2044	2348	2348	2700	2700	2700
MTO Laws*	"	844	1206	1856	2126	2430	2430	2794	2794	2794
LPG:										
Domestic	MT	1633	1966	1966	2301	2634	2634	3028	7328	3449
Bulk	"	1927	2260	2260	2595	2928	2928	3978	3978	3978
Industrial	"	---	---	---	---	---	---	5128	5128	5128

+NOTE : Prices have been rounded to the nearest Rupee.

* = Prices are exclusive of Customs and Excise Duties.

@ = With the introduction of MS 87, the price of the product was increased to Rs.5538/KL w.e.f. 1.9.1983.

\# = Effective 26.3.1985.

\+ = w.e.f. 1.9.83 the price was reduced to Rs. 1148/KL.

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1986.

	Bombay	Madras	Delhi	Calcutta	Kanpur
SUPERIOR KEROSINE OIL (RS/KL)					
Ex-MI/Storage Point Price	1956.93	1956.93	2033.53	1977.74	2073.19
Bombay Octroi Surcharge/ State Surcharge	58.05	35.00	25.00	-	5.00
Sales Tax	Exempted	79.68	61.76	98.89	182.88
Total	2014.98	2071.61	2120.29	2076.63	2261.07
Transportation	39.83	25.00	42.24	30.00	50.00
Wholesale Dealer's Commission	30.30	8.00	9.83	30.30	30.30
RDA/Leakage etc.	19.50	32.72	-	-	-
Wholesale price	2104.61	2137.33	2172.36	2136.93	2241.37
Rounding off benefit	-	-	2.64	-	-
Leakage/Extraordinary Allowance	19.00	-	-	-	-
Retailer's Profit	39.70	112.70	69.02	39.70	50.00
Retailer's Transportation	-	-	-	22.93	20.00
Rounding off benefit	-	-	2.98	-	-
Adhoc increase for retailers Transport	-	-	-	65.00	-
Total Rs./KL	2163.31	2250.03	2247.00	2264.56	2411.37
RSP Rs./Litre	2.17	2.25	2.25	2.27	2.40
LIQUIFIED PETROLEUM GAS(Rs 14.2 Kg.Cylinder)					
Ex-Refinery/Bottling Plant Price	48.97	48.97	50.57	48.97	52.95
Over/Under recovery	(-)0.21	(-)0.21	(-)0.22	1.80	(-)0.22
Net-Rate	48.76	48.76	50.35	50.77	52.73
Bombay Octroi Surcharge/ Octroi/Entry Tax	1.24	--	0.20	0.51	-
State Surcharge	--	--	0.36	--	--
Sub-Total	50.00	48.76	50.91	51.28	52.73
Local Delivery Charges	0.75	0.75	0.75	0.75	0.75
Billable rate excl. of Sales Tax	50.75	49.51	51.66	52.03	43.48
Sales Tax	2.03	3.96	2.58	7.80	4.28
Surcharge on Sales Tax	--	0.20	--	--	0.43
T.O.T./Addl. Sales Tax	--	0.20	--	--	--
Billable rate incl. of Sales Tax	52.78	53.87	54.24	59.83	58.19
Distributor's Commission	3.37	3.37	3.37	3.37	3.37
Retail Selling Price Ps/cyl.	56.15	57.24	57.61	63.20	61.56

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1986.

(Rs./K.L.)

	Bombay	Madras	Delhi	Calcutta	Kanpur
	MOTOR SPIRIT 87 ON				
Ex-MI/Storage Point Price	6769.07	6769.07	6843.90	6798.94	6886.78
Bombay Octroi Surcharge/ State Surcharge	112.00	35.00	25.00	10.00	25.00
Entry Tax	-	-	-	20.00	-
RPO Charges	11.36	11.36	11.36	11.36	11.36
RPO Surcharge	15.00	15.00	15.00	15.00	15.00
Delivery Charges Beyond FDZ	-	-	-	2.88	-
Octroi/T.Tax/Local Levies	-	-	-	-	50.00
Sub. Total	6907.43	6830.43	6895.26	6825.18	6988.14
Sales Tax	828.89	956.26	482.67	685.82	698.81
Dealer's Commission	50.00	50.00	50.00	50.00	50.00
Total Rs./KL	7786.32	7836.69	7427.93	7594.00	7736.95
R.S.P. Rs./Litre	7.79	7.84	7.43	6.60	7.74
	HIGH SPEED DIESEL OIL:				
Ex-MI/Storage Point Price	3115.55	3115.55	3192.17	3137.48	3235.71
Bombay Octroi Surcharge/ State Surcharge	76.03	35.00	25.00	1.00	5.00
Entry Tax	-	-	-	20.00	-
RPO Charges	7.27	7.27	7.27	7.27	7.27
RPO Surcharge	20.00	20.00	20.00	20.00	20.00
Delivery Charges Beyond FDZ	-	-	-	2.88	-
Octroi/T.Tax/Local Levies	-	-	4.68	-	40.00
Sub. Total	3218.85	3177.82	3249.12	3188.63	3307.98
Sales Tax	321.89	444.89	227.44	382.64	396.96
Dealer's Commission	20.00	20.00	20.00	20.00	20.00
Total Rs./KL	3560.74	3642.71	3496.56	3591.27	3724.94
R.S.P. Rs./Litre	3.57	3.65	3.50	3.60	3.73
	LIGHT DIESEL OIL:				
Ex-MI/Storage Point Price	3053.97	3053.97	3151.08	3076.57	3206.61
Bombay Octroi Surcharge/ State Surcharge/Entry Tax	46.55	35.00	25.00	20.00	5.00
Octroi	-	-	4.82	-	50.00
Total	3100.52	3088.97	3180.88	3096.57	3261.61
Sales Tax	124.02	432.46	222.66	371.59	391.39
Total Rs./KL	3224.54	3521.43	3403.56	3468.16	3653.00

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1986.

(Rs./K.L.)

	Bombay	Madras	Delhi	Calcutta	Kanpur
FUEL OIL(NON-FERTILIZER)					
Ex-MI/Storage Point Price	2903.06	2903.06	3007.50	2927.37	
Bombay Octroi Surcharge/ State Surcharge/Entry Tax	73.92	35.00	25.00	20.00	
Octroi	---	---	5.18	---	
Total	2976.98	2938.06	3037.68	2947.37	
Sales Tax	119.08	323.19	212.64	235.79	
Total Rs./KL	3096.06	3261.25	3250.32	3183.16	
ATF (DOMESTIC AIRLINES)					
Ex-MI/Storage Point Price	5239.85	5239.85	5317.28	5260.24	5472.60
Bombay Octroi Surcharge/ State Surcharge/Entry Tax	103.50	---	25.00	---	---
Octroi	---	---	15.00	---	10.00
Airfield Charges	24.44	24.44	24.44	24.44	41.94
Entry Tax	---	---	---	52.85	---
Sub-Total	5367.79	5264.29	5381.72	5337.53	5524.55
Sales Tax	135.76*	552.75	376.72	1334.38	552.45
Total Rs./KL	5503.55	5817.04	5758.44	6671.91	6076.99

* Concessional rate of Sales Tax applicable for supplies to IAC flights only in the State of Maharashtra.

ATF FOR INTERNATIONAL AIRLINES				
Ex-MI/Storage Point Price	5239.85	5239.85	5332.28	5260.24
Less Refund of Basic Excise Duty	333.52	333.52	333.52	333.52
Bonded Price	4906.33	4906.33	4998.74	4926.72
Add:Applicable Concessionl Duty	24.60	24.60	24.60	24.60
International Airfield Charges	24.44	24.44	24.44	24.44
Adhoc Surcharge	4955.37	4955.37	5047.80	4975.76
Sub-Total	(1503.00)	(1503.00)	(1503.00)	(1503.00)
Sales Tax	135.76	362.50	---	---
Total Rs./KL	3588.13	3814.87	3544.80	3472.76

NOTE: Fot Scheduled Airlines payment of Sales Tax is exempted at all parts except Bombay and Madras.

Trends in Retail Selling Prices of Selected Petroleum Products in Metropolitan Towns in India

Prices as on	Bombay	Calcutta	Delhi	Madras	Kanpur
		MOTOR SPIRIT 83 (RS./Litre)			
1.1.1971	1.16	1.23	1.19	1.16	1.24
1.1.1972	1.42	1.46	1.43	1.39	1.46
1.1.1973	1.43	1.46	1.44	1.41	1.47
1.1.1974	2.81	2.82	2.78	2.69	2.73
1.1.1975	3.26	3.27	3.27	3.19	3.35
1.1.1976	3.36	3.39	3.39	3.30	3.47
1.1.1977	3.39	3.38	3.39	3.29	3.48
1.1.1978	3.38	3.38	3.39	3.29	3.48
1.1.1979	4.04	4.04	4.04	4.90	4.14
17.8.1979	4.43	4.42	4.41	4.25	4.52
8.6.1980	5.15	5.14	5.11	4.90	5.22
13.1.1981	5.56	5.54	5.50	5.29	5.62
11.7.1981	6.15	6.13	6.07	6.17	6.19
1.4.1982	6.15	6.13	6.07	6.17	6.19
15.2.1983	6.21	6.16	5.90	6.17	6.25
1.4.1983	6.21	6.31	5.99	6.16	6.15
1.4.1984(MS-87 ON)	6.32	6.24	6.09	6.44	6.26
1.6.1984	6.41	6.24	6.12	6.44	6.26
17.3.1985	7.34	7.16	7.00	7.39	7.16
1.2.1986	7.90	7.71	7.54	7.96	7.85
6.2.1986/1.4.1986	7.79	7.60	7.43	7.84	7.74
		HIGH SPEED DIESEL OIL (RS./Litre)			
1.1.1971	0.79	0.86	0.83	0.82	0.85
1.1.1972	0.83	0.90	0.86	0.87	0.88
1.1.1973	0.83	0.90	0.86	0.87	0.88
1.1.1974	0.81	0.87	0.84	0.88	0.87
1.1.1975	1.06	1.10	1.11	1.15	1.15
1.1.1976	1.28	1.35	1.36	1.36	1.32
1.1.1977	1.27	1.36	1.34	1.35	1.33
1.1.1978	1.27	1.36	1.34	1.35	1.33
1.4.1979	1.39	1.49	1.47	1.49	1.50
17.8.1979	1.58	1.68	1.66	1.66	1.69
11.9.1979	1.50	1.60	1.58	1.59	1.61
8.6.1980	2.21	2.25	2.28	2.24	2.34
13.1.1981	2.61	2.66	2.67	2.66	2.76
11.7.1981	2.96	3.01	3.02	3.05	3.11
1.4.1982	2.96	3.01	3.02	3.05	3.11
15.2.1983	3.21	3.31	3.18	3.27	3.46
1.4.1983	3.21	3.30	3.19	3.26	3.40
1.4.1984	3.21	3.30	3.20	3.34	3.42
1.6.1984	3.27	3.30	3.22	3.34	3.42
17.3.1985	3.52	3.35	3.47	3.60	3.70
26.3.1985	3.45	3.48	3.39	3.52	3.60
1.2.1986	3.64	3.68	3.58	3.73	3.81
6.2.1986/1.4.1986	3.57	3.60	3.50	3.65	3.73

Trends in Retail Selling Prices of Selected Petroleum Products in Metropolitan Towns in India

Prices as on	Bombay	Calcutta	Delhi	Madras	Kanpur
		SUPERIOR KEROSENE (RS./Litre)			
1.1.1971	0.54	0.58	0.58	0.56	0.65
1.1.1972	0.57	0.61	0.61	0.57	0.69
1.1.1973	0.61	0.65	0.65	0.65	0.74
1.1.1974	0.82	0.84	0.82	0.85	0.86
1.1.1975	1.04	1.05	1.08	1.10	1.25
1.1.1976	1.21	1.25	1.29	1.31	1.39
1.1.1977	1.21	1.24	1.30	1.31	1.34
1.1.1978	1.18	1.24	1.30	1.31	1.34
1.4.1979	1.29	1.38	1.43	1.43	1.47
17.8.1979	1.46	1.56	1.61	1.62	1.66
11.9.1979	1.39	1.49	1.54	1.55	1.59
8.6.1980	1.39	1.49	1.54	1.55	1.59
13.1.1981	1.49	1.60	1.65	1.67	1.70
11.7.1981	1.60	1.76	1.81	1.84	1.90
1.4.1982	1.66	1.80	1.81	1.78	1.90
15.2.1983 Subsidised	1.70	1.80	1.77	1.78	1.95
Non-subsidised	3.00	3.12	3.10	3.15	3.35
18.3.1983	1.80	1.91	1.88	1.89	2.10
1.4.1983	1.80	1.90	1.88	1.88	2.05
1.4.1984	1.81	1.92	1.89	1.88	2.05
1.6.1984	1.85	1.92	1.92	1.88	2.05
17.3.1985	2.10	2.18	2.18	2.15	2.33
26.3.1985	2.03	2.12	2.11	2.08	2.25
1.2.1986	2.26	2.36	2.34	2.34	2.50
6.2.1986/1.4.1986	2.17	2.27	2.25	2.25	2.40
		LIQUIFIED PETROLEUM GAS (RS./Cylinders)			
	15.2 Kg.cyl	15 Kg. cyl	15 Kg. cyl	15 Kg.cyl	15 Kg. cyl
1.1.1971	----	23.33	22.01	23.96	22.49
1.1.1974	20.01	25.28	25.20	21.60	25.13
1.1.1975	22.10	27.79	27.36	23.94	27.61
1.1.1976	26.75@	33.31	32.61	29.36	32.85
1.1.1979	26.94@	37.06	34.98	31.90	35.42
17.8.1979	33.96@	42.93	40.23	37.32	40.82
8.6.1980	33.96@	42.93	40.23	37.81	40.82
13.1.1981	38.94@	49.09	45.53	---	46.26
11.7.1981	43.52@	54.84	50.78	48.74	53.06
1.4.1982	43.52@	54.84	50.78	48.74	53.06
1.9.1982	43.14@	51.93	44.58@	47.17	49.41
1.4.1983	43.14@	52.71	45.09@	47.17	50.41
1.4.1984	43.14@	52.71	45.09@	44.65@	47.72@
1.6.1984	44.11@	49.90@	45.47@	44.65@	48.81@
17.3.1985	49.95@	56.34@	51.35@	50.74@	54.89
1.2.1986	60.28@	67.77@	61.79@	61.56@	65.90@
6.2.1986/1.4.1986	56.15@	63.20@	57.61@	57.24@	61.56@

@ = For 14.2 Kg. Cylinder.

RATES OF DEALERS COMMISSION FOR MS. HSDO AND LPG IN INDIA

Slab of Annual Volumes of Sales (KL /Annual)	Dealers Commission effective from								
	1.4. 1977	15.7. 1980	1.3. 1981	16.8. 1981	1.10. 1982	15.2. 1983	1.9. 1983	17.3. 1985	6.2. 1986
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
MOTOR SPIRIT (Rs./KL):									
Prior to 1.7.1982:									
0-480	80*	100	107	114					
481-1080	50*	70	75	82					
Over 1080	35*	50	55	61					
Eeffective From 1.7.1982:									
0-360					134		135	146	151
361-600					98		99	108	113
601-1080					86		87	95	99
Above 1080					69		70	76	79
HIGH SPEED DIESEL OIL (RS./KL):									
Prior to 1.7.1982:									
0-600	50	55	58	60					
601-1200	25	30	33	35					
Above 1200	20	25	28	30					
Effective from 1.7.1982:									
0-360					79	81		82	84
361-600					58	60		62	63
601-1080					42	43		44	45
Above 1080					36	37		38	39

L.P.G. (RS./CYLINDER):

	Prior to Ist March 1982	Effective from 1.3.1983	
Per cylinder	3.37	3.62	3.62

* = The minimum rate of commission was Rs. 50/KL.

NOTE: The rates of dealership commission fixed at 3 Annas per imperial gallon for MS in 1954 and at 1 Anna and 3 paise per imperial gallon for HSDO in 1955 continued upto 30th June 1976. The revised commission rates effective 1.7.1976 were as follows:

Sales per Annum (combined MS/HSDO Sales)	(Rs./KL.)	(Rs./KL)
Upto 360	80	50
361 to 720	35	10
721 and above	25	10

XIV. EXCISE/CUSTOM DUTIES AND SALES TAX

REALISATION OF EXCISE & CUSTOM DUTIES FROM CRUDE OIL AND PETROLEUM PRODUCT DURING 1970-71 TO 1986-87(B.E.)

(Rs./Crores)

Products	Actuals							R.E.	B.E.
	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. EXCISE DUTIES									
1. Mogas	173	404	493	518	559	528	678	755	811
2. Kerosene Oil	121	161	124	150	168	176	164	204	243
3. Refined Diesel Oil & Vaporising Oil	232	300	280	359	380	423	425	574	625
4. Diesel Oil (Nos.)	23	21	20	19	21	21	25	23	25
5. Furnace Oil	33	49	45	39	44	43	40	40	30
6. Asphalt/Bitumen & Tar	9	11	16	19	36	27	29	33	34
7. Blended or Compounded Lubes & Greases	-	45	-	-	-	-	-	-	-
8. Petroleum Products (Nos.)	17	46	175	182	188	193	222	234	238
9. Calcined Pet. Coke	-	3	5	7(included in item No.6 above)					
10. Petroleum Gas	-	-	-	1	12	19	22	32	39
TOTAL(A)	608	1040	1158	1294	1408	1430	1605	1895	2045
B. CUSTOMS DUTIES									
1. Petroleum Crude	-	13	16	16	17	25	138	755	800
2. Mogas	5	9	8	10	6	2	4	1	Neg.
3. Kerosene Oil	10	37	83	87	79	80	116	105	97
4. Batching Lubricating & Other Mineral Oils	9	21	103	92	55	41	113	142	151
5. HSD & Vap. Oil	1	26	127	76	99	70	98	35	30
6. Indl. Fuel Oil	5	9	17	7	neg.	1	3	1	24
TOTAL(B)	30	115	354	288	256	219	472	1039	1102
GRAND TOTAL (A+B)	638	1155	1512	1582	1664	1649	2077	2934	3147

Figures rounded to nearest crores.

Source: Budget Papers of the Central Government.

PERCENTAGE SHARE OF CENTRAL EXCISE ON POL TO TOTAL CENTRAL EXCISE AND TO NET NATIONAL PRODUCTS.

Year	Net National Product at current prices (.....Rs. Crores.....)	Central Excise	Central Excise on POL	Central Excise as % of NNP(%)	Central Excise on POL as % of NNP(%)	Central Excise on POL as % of Total Central Excise(%)
1.	2.	3.	4.	5.	6.	7.
1960-61	13263	416	101	3.1	0.8	24.3
1965-66	20637	898	261	4.4	1.3	29.1
1970-71	34235	1759	608	5.1	1.8	34.6
1971-72	36582	2061	708	5.6	1.9	34.4
1972-73	40317	2324	767	5.8	1.9	33.0
1973-74	50468	2602	874	5.2	1.7	33.6
1974-75	59505	3231	1011	5.4	1.7	31.3
1975-76	62302	3845	1040	6.2	1.7	27.1
1976-77	66924	4221	1110	6.3	1.7	26.3
1977-78	75706	4448	1152	5.9	1.5	25.9
1978-79	81321	5194	1290	6.4	1.6	24.0
1979-80	88716	6148	1407	6.9	1.6	22.9
1980-81	105804	6479	1158	6.1	1.1	17.9
1981-82	120691	7444	1294	6.2	1.1	17.4
1982-83	133457	8302	1408	6.2	1.1	17.0
1983-84	157830	10204	1430	6.5	0.9	14.0
1984-85	173207	10987	1605	6.3	0.9	14.6
1985-86(RE)	N.A.	12920	1895	N.A.	N.A.	14.7

SOURCE: i) Government of India's Economic Survey for N.N.P.
ii) Budget papers of Central Government.

COMPOSITE INCIDENCE OF EXCISE AND CUSTOM DUTIES ON PETROLEUM PRODUCTS

Y E A R	Consumption of POL Products(Excl.) R.B.F. ('000' MTS)	Central Excise Duty realisation (Rs./Crores)	Customs Duties realisation (Rs./Crores)	Total Central Excise & Custom duties (Rs./Crores)	Composite Incidence of Excise & Customs duties (Rs./MT)
1.	2.	3.	4.	5.	6.
1960-61	7985	101	23	124	155.29
1965-66	11917	261	83	344	288.66
1970-71	17912	608	30	638	356.19
1971-72	20071	709	63	772	384.63
1972-73	21715	767	86	853	392.82
1973-74	22346	874	96	970	434.08
1974-75	22105	1011	96	1106	500.34
1975-76	22447	1040	115	1155	514.55
1976-77	24101	1110	112	1222	507.03
1977-78	25539	1152	127	1279	500.80
1978-79	28241	1290	190	1480	524.06
1979-80	29883	1407	213	1620	542.10
1980-81	30896	1158	354	1512	489.38
1981-82	32523	1294	288	1582	486.42
1982-83	34657	1408	256	1664	480.13
1983-84	35841	1430	219	1649	460.1
1984-85	38795	1605	472	2077	535.4
1985-86	40386	1895	1039	2934	726.5

ROYALTY AND OIL DEVELOPMENT CESS PAID BY OIL COMPANIES ON PRODUCTION OF CRUDE OIL AND NATURAL GAS SINCE 1970-71 TO 1985-86

(Rs./Lakhs)

YEAR	ROYALTY ON CRUDE OIL				ROYALTY ON NATURAL GAS				OIL DEVELP-EMENT CESS.
	Gujarat	Assam	B.High	Total	Gujarat	Assam	B.Hight	Total	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1970-71	343	333	-	676	22	4	-	26	-
1971-72	406	370	-	776	25	4	-	29	-
1972-73	532	555	-	1087	28	5	-	33	-
1973-74	520	548	-	1068	26	5	-	31	-
1974-75	576	584	-	1160	36	8	-	44	3081
1975-76	615	645	-	1260	43	26	-	69	5007
1976-77	1279	1087	156	2522	44	59	-	103	5289
1977-78	1742	1907	1016	4665	102	50	-	152	6375
1978-79	1771	1727	1349	4847	88	66	-	154	6889
1979-80	1566	1771	1761	5098	240	65	15	320	6970
1980-81	1578	531	1997	4106	168	36	50	283	6040
1981-82	2075	3155	4430	9660	184	69	258	511	13897
1982-83	1927	3498	7513	12938	32	123	593	748	26884
1983-84	2171	3054	10305	15538	305	108	911	1324	81279
1984-85	2367	3035	11932	17334	183	126	2109	2418	84434
1985-86(P)	2602	3040	12074	17716	242	87	1905	2234	86629

NOTE: 1) The table has been revised on the basis of confirmed figures in concurance with the published accounts of the companies.

2) Royalty figures in respect of oil prior to 1981-82 pertain to calender years and there-after to Financial years.

3) Oil Development cess was levied w.e.f. 23.7.1974.

(P) Provisional.

EXCISE DUTY ELEMENT INCLUDED IN SELLING PRICES OF BULK REFINED PETROLEUM PRODUCTS.

(Rupees/Selling Unit)

PRODUCTS.	Selling Unit	w.e.f. 1.3.79	w.e.f. 17.8.79	w.e.f. 11.9.79	w.e.f. 8.6.80	w.e.f. 13.1.81	w.e.f. 11.7.81	w.e.f. 15.2.83	w.e.f. 1.4.83	w.e.f. 1.9.83	w.e.f. 1.4.84/ 1.4.85/ 1.4.86
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Avgas 100/130	KL	2702.43	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89
2. Avgas 115/145	KL	2700.50	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32
3. Avgas 73	KL	2701.60	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21
4. M.S. 87@@	KL	2703.25	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56
5. M.S. 93	KL	2704.90	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92
6. A.T.F.	KL	493.10	402.56	402.56	333.52@	333.52	333.52	333.52	333.52	333.52	333.52
7. S.K.O.	KL	493.10	402.63	333.59	333.59@	333.59	333.59	333.59	333.59	333.59	333.59
8. H.S.D.O.	KL	493.95	399.15	330.00	330.00@	330.00	330.00	330.00	330.00	330.00	330.00
9. L.D.O.	KL	74.15	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96
10. F.O. (Fert. Use)	KL	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	---
11. F.O. (Non-Ferts.Use)	KL	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82
12. Bitumen (Bulk)	MT	157.55	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30
13. Bitumen (Packed)	MT	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55
14. LPG(Domestic)(Packed)	MT	400.00	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50
15. LPG(Inuustrial)Bulk	MT	400.00	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50
16. Naphtha*(Fert.Use)	KL	4.50	4.50	4.36	4.36	4.36	4.36	---	---	4.40	4.40
17. Naphtha*(For Non-Fert.Use)	KL	26.50	26.50	26.50	26.50	26.50	26.50	---	---	26.25	26.25

* Duty at 15 Degree C.

@@ MS 83 was replaced by MS 87 w.e.f. 1.9.1983.

@ Revision effective from 11.9.1979.

NOTE: No Custom/Excise Duty is chargeable on FO when used as feed stock,the duty @ Rs. 63.46/KL only is chargeable when used in fetrilizer industry for purposes other then feed stock.

EXCISE AND CUSTOM DUTIES IN THE BASIC CEILING SELLING PRICES (BCSP) OF POL PRODUCTS EX-STORAGE POINT EFFECTIVE FROM 6.2.1986.

Rs./Selling Unit

PRODUCT	Selling Unit	Price Ex-Storage Point (Bombay) (Rs.)@	Excise/Custom Duties (Rs.)	Col.4 as % of Col.3
(1)	(2)	(3)	(4)	(5)
A.T.F.	KL	5239.85	333.52	6.4%
Motor Spirit 87	KL	6769.07	2215.56	32.7%
Motor Spirit 93	KL	6824.48	2216.92	32.5%
H.S.D.O.	KL	3115.55	330.00	10.6%
S.K.O	KL	1956.93	333.59	17.1%
L.D.O.	KL	3053.97	153.96	5.0%
F.O. (Non-Fertilizers)	KL	2903.06	125.82	4.3%
F.O. (Fertilizers)	KL	1320.24	$	--
Bitumen St.Grade (Bulk)	MT	2524.85	110.30	4.4%
Bitumen St.Grade (Packed)	MT	3099.91	157.55	5.1%
Naphtha for non-Ferts.*	MT	3211.10		
Naphtha for ferts.*	MT	1982.31		
J.B.O.*	MT	2712.42		
SBP Spirit 55/115*	KL	3972.56		
SBP Spirit 64/69*	KL	4173.36		
Solvent 1425*	KL	3972.56		
Hexane*	KL	4173.36		
M.T.O. 140/205*	KL	2700.26		
M.T.O. (Laws)*	KL	2793.96		
L.P.G.(Domestic)(Packed)	MT	3448.98	262.50	7.6%
L.P.G.(Industrial) (Bulk Essential)	MT	3977.79	262.50	6.6%
L.P.G. Industrial Bulk Non-Essential	MT	5127.79	262.50	5.1%

* = Prices shown against these products are exclusive of Custom/Excise duties chargeable extra at applicable rates.

@ = Based on the Basic ceiling selling prices for all refinery points (Primary pricing points) applicable as at Bombay w.e.f. 6.2.1986.

$ =No excise duty is chargable when used as feed stock. Excise duty @ Rs.63.46/KL only chargeable when used in fertilizer industry,other then feed stock. This is applicable w.e.f. 17.3.1985.

*SALES TAX RATES APPLICABLE ON OIL, GAS AND PETROLEUM PRODUCTS AS ON 1.4.1986.

S.NO.	Products	Andhra Pradesh	Assam	Bihar	Chandi-garh	Delhi	Goa, Daman & Diu	Gujarat
A.	OIL & GAS:							
	Crude Oil	4%	4%	4%	--	4%	--	4%
	Natural Gas	--	7%	--	--	--	--	10%+10%SC on ST
B.	PETROLEUM PRODUCTS:							
1.	Aviation Sprit	16%	10%	16%	15P/L	7%	12%	Bonded 30% & Duty Paid 9%
2.	Avition Turbine Fuel	13.1%	10%	16%	15P/L	7%	12%	Bonded 30% & Duty Paid 23%
3.	Motor Spirit	16%	10%	9%	15P/L	7%	12%	15%
4.	H.S.D.	14.5%	11%	14%	10P/L	7%	12%	12%
5.	L.D.O.	14.5%	11%	14%	6%	7%	12%	7%
6.	M.L.O.	14.5%	7%	9%	6%	7%	6%	7%
7.	S.K.O.	5.2%	2%	6%	6%	3%	4%	3%
8.	I.K.O.	5.2%	2%	5%	6%	3%	4%	3%
9.	F.O.	5.2%	7%	8%	6%	7%	12%	7%
10.	M.T.O.	5.2%	7%	9%	6%	7%	6%	7%
11.	Lubes	9%	9%	9%	6%	7%	6%	10%
12.	Greases	9%	9%	9%	6%	7%	6%	10%
13.	Petroleum Naphtha	7.7%	7%	9%	6%	7%	12%	10%
14.	Bitumen	6.5%	7%	9%	6%	7%	6%	7%
15.	Petroleum Coke	4.00%	4%	4%	--	4%	4%	4%
16.	Indane(LPG)	6.5%	7%	9%	6%	5%	12%	12%
17.	Transformer Oil	5.2%	7%	9%	6%	7%	6%	5%
18.	H.B. Fluid	6.5%	9%	9%	6%	7%	6%	11%

* Please also see the notes on page. 84

*SALES TAX RATES APPLICABLE ON OIL, GAS AND PETROLEUM PRODUCTS AS ON 1.4.1986. (Contd...)

S.NO.	Products	Haryana	Himachal Pradesh	Jammu & Kashmir	Kerala	Madhya Pradesh	Maharash-tra	Karna-taka
A.	OIL & GAS:							
	Crude Oil	4%	4%	--	4%	4%	4%+12% sconst	4%
	Natural Gas	--	--	--	--	--	4%	--
B.	PETROLEUM PRODUCTS:							
1.	Aviation Sprit	6%	3.5%	8%	12%	12%	Bonded 23% Duty paid 9%	19%
2.	Avition Turbine Fuel	6%	3.5%	8%	10%	12%	Bonded 30% Duty paid 23%	20%
3.	Motor Spirit	6%	3.5%	4%	15%	13.50%	12%	19%
4.	H.S.D.	6%	3.5%	8%	20%	13.50%	10%	16%
5.	L.D.O.	8%	7%	8%	20%	13.50%	4%	16%
6.	M.L.O.	8%	7%	8%	5%	10%	4%	7%
7.	S.K.O.	8%	7%	2%	4%	2%	Exempted	5%
8.	I.K.O.	8%	7%	2%	4%	2%	Exempted	5%
9.	F.O.	8%	7%	8%	5%	12%	4%	13%
10.	M.T.O.	8%	7%	8%	7%	10%	4%	10%
11.	Lubes	8%	7%	8%	10%	10%	6%	13%
12.	Greases	8%	7%	8%	10%	10%	6%	13%
13.	Petroleum Naphtha	8%	7%	8%	5%	10%	4%	7%
14.	Bitumen	8%	7%	5%	8%	10%	4%	10%
15.	Petroleum Coke	4%	4%	--	4%	4%	4%	4%
16.	Indane(LPG)	8%	7%	Exempted	15%	12%	4%	10%
17.	Transformer Oil	8%	7%	8%	10%	10%	4%	13%
18.	H.B. Fluid	8%	7%	8%	10%	10%	10%	10%

* Please also see the notes on page. 84

*SALES TAX RATES APPLICABLE ON OIL, GAS AND PETROLEUM PRODUCTS AS ON 1.4.1986. (Contd...)

S.NO.	Products	Meghalaya	Manipur	Nagaland	Mizoram	Orissa	Pondicherry
A.	OIL & GAS:						
	Crude Oil	--	--	4%	--	4%	3%
	Natural Gas	7%	6%	6%			
B.	PETROLEUM PRODUCTS:						
1.	Aviation Sprit		20 PPL	8 PPL		13%	3%
2.	Avition Turbine Fuel		20 PPL	8 PPL		10%	3%
3.	Motor Spirit	8 PPL	30 PPL	8 PPL	7 PPL	10%	6%
4.	H.S.D.	7 PPL	25 PPL	7 PPL	5 PPL	13%	4%
5.	L.D.O.	--	25 PPL	7 PPL	5 PPL	13%	3%
6.	M.L.O.	--	6%	5%	--	7%	3%
7.	S.K.O.	3 PPL	3%	3 PPL	--	8%	Abolished
8.	I.K.O.	--	3%	2 PPL	--	Exempt	Abolished
9.	F.O.	--	6%	5%	--	8%	3%
10.	M.T.O.	--	6%	--	--	7%	--
11.	Lubes	9 PPL	25 PPL	9 PPL	8 PPL	12%	6%
12.	Greases		25 PPL	9PPL	--	12%	6%
13.	Petroleum Naphtha	--	6%	--	--	7%	--
14.	Bitumen	--	6%	5%	--	7%	--
15.	Petroleum Coke	--	4%	4%	--	4%	3%
16.	Indane(LPG)	--	6%	5%	--	6%@	--
17.	Transformer Oil	--	--	--	--	--	--
18.	H.B. Fluid	--	--	--	--	--	--

@ Effective from 5.4.1986.

* Please also see the notes on page. 84

*SALES TAX RATES APPLICABLE ON OIL, GAS AND PETROLEUM PRODUCTS AS ON 1.4.1986. (Contd...)

S.NO.	Products	Punjab	Rajasthan	Tripura	Tamilnadu	U.Pradesh	W.Bengal.
A.	OIL & GAS:						
	Crude Oil	4%	4%	4%	4%	4%	4%
	Natural Gas	--	--	12%	--	--	--
B.	PETROLEUM PRODUCTS:						
1.	Aviation Sprit	6%	12%	5%	10%	10%	9%
2.	Avition Turbine Fuel	7.7%	12%	5%	10%	10%	25%
3.	Motor Spirit	6%	15%	8%	14%	10%	9.9%
4.	H.S.D.	4%	12.5%	5%	14%	12%	12%
5.	L.D.O.	7.7%	12.5%	5%	14%	12%	12%
6.	M.L.O.	7.7%	8%	5%	10%	8%	8.02%
7.	S.K.O.	7.7%	8%	5%	4%	8%	5%
8.	I.K.O.	7.7%	8%	5%	4%	8%	Exempted
9.	F.O.	7.7%	8%	5%	10%	5%	8%
10.	M.T.O.	7.7%	8%	5%	10%	12%	8.02%
11.	Lubes	7.7%	8%	8%	10%	8%	11%
12.	Greases	7.7%	8%	5%	10%	8%	11%
13.	Petroleum Naphtha	7.7%	8%	5%	10%	8%	8.02%
14.	Bitumen	7.7%	8%	5%	8%	8%	8.02%
15.	Petroleum Coke	4%	4%	12%	4%	4%	4%
16.	Indane(LPG)	7.7%	8%	5%	8%	8%	15%
17.	Transformer Oil	7.7%	8%	5%	4%	8%	8.02%
18.	H.B. Fluid	7.7%	8%	5%	8%	8%	8.02%

* Please also see the notes on page.84

IN ADDITON TO THE SALES TAX PAYABLE THE FOLLOWING TAX AMOUNTS ARE ALSO PAYABLE/RECOVERABLE

1. Andhra Pradesh	Surcharge at 0.5% per rupee on taxable turnover. This applies to all products. This is included in the Sales Tax rates indicated and it is recoverable. Also surcharges @10% on tax. Already included in S.T.Rates.
2. Bihar	5% surcharge on tax. This is non-recoverable. 1% addl.tax on gross turnover recoverale (Nont on MS,ATF,AVN sprits, HSD,LDO,SKO etc.) off.1.4.81.
3. Chandigarh	2% Addl.tax on tax. It is recoverable.
4. Goa,Daman & Diu	Addl.S.Tax @10% of Sales Tax is payable which is not recoverable on our sales.
5. Gujarat	Addl.Sales Tax at 10% on Sales Tax in respect of products under Gujrat Sales Tax Act, and on MST Act. This is recoverable.
6. Haryana	Surcharge at 2% on Sales Tax on all products undersales tax Act is payable. This recoverable.
7. H.Pradesh	10% surcharge recoverable under GST Act.
8. J & K	Surcharges at 5% of Sales Tax is payable and the same is recoverable from the market. This does not apply to MST products.
9. Kerala	Surcharge at 8% of Sales Tax is payable, but the same is not recoverable from the market. Addl.Sales Tax @ 20% of Sales Tax is also payable which is recoverable on our Sales.
10. Madhya Pradesh	The Sales Tax rates are inclusive of turnover tax levies. Also addl.Tax @ 1% is recoverable.
11. Maharashtra	Addl.Sals Tax @ 12% of tax is payable under the Sales Tax Act but the same is not recoverable from the market. This does not apply to Kerosene and declared goods.
12. Karnataka	1. 1% turnover tax is non recoverable on oil value (Turnover) up between 15 Lakhs & 250 lakhs and @ 1.25% if turnover is above 250 Lakhs. 2. Entry tax @ 1% on oil value of Pet.products under the "the Karnataka tax on entry of goods into local areas for consumption use or sale therein 1979"(Not applicable for LPG< Kerosene, Naphtha for use in manufacture of fertiliser)
13. Orissa	Addl.Sales Tax at 0.5% of Invoice value is payable on all products. This is recoverable.
14. Punjab	Addl.tax at 10% of the Sales Tax on products under General Sales Tax Act is payble and is recoverable. This has already been included in ST rates.
15. Rajasthan	10% surcharge on tax is recoverable.
16. Tamil Nadu	Surcharge at 5.0% on tax is payable on all products which is recoverable in specified area. All turnover tax at 1.25% on taxable turnover, if turnover is between Rs. 40.00 lakhs. under Sales Tax Act is also payable which has to be brone by seller. Addl.S/C @ 5% on tax is payable but not applicable for Petrol, HSD, SKO,LDO effective 10.6.81. This applies to Sales within Madras city and its suburban area within 32 kilometers.
17. U.P.	10% addl.tax on tax. This is recoverable.
18. W.Bengal	Turnover Tax @ 1% of the gross turnover of the bill is payable. This is non-recoverable.

SALES TAX PAYMENTS (INCLUSIVE OF MST AND CST) ON CRUDE OIL/CONDENSATES, NATURAL GAS & PETROLEUM PRODUCTS MADE BY THE OIL COMPANIES TO STATE/UNION TERRITORY GOVERNMENTS DURING THE YEAR 1979-80 TO 1985-86.

(Rs.in lakhs)

S T A T E	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
1. Crude Oil							
Assam	396	193	1707	2226	2752	2723	2550
Gujarat	471	476	1228	1467	1911	2056	2248
Arunachal Pradesh	--	1	1	1	8	34	32
Nagaland	--	--	--	--	--	--	31
Maharashtra	--	--	--	--	3487	3795	6965
Total (1)	867	670	2936	3694	8158	8608	11826
2. Natural Gas							
Assam	69	56	84	113	98	128	114
Gujarat	185	214	227	232	259	264	341
Maharashtra (Bombay High)	--	--	--	862	602	1190	1356
Total (2)	254	270	311	1207	959	1582	1811
3. POL Products							
(a) States							
Andhra Pradesh	2831	4727	5865	6193	7525	9084	10758
Assam	720	798	965	1189	1614	1911	2688
Bihar	2143	2992	4702	4166	5366	6131	7078
Gujarat	4798	7254	9323	10712	11408	12498	15042
Harayana	590	678	870	1093	1459	1692	2026
Himachal Pradesh	17	20	22	24	43	53	81
Jammu & Kashmir	189	264	336	342	372	411	483
Karnataka	2711	4034	4652	5697	6043	8258	10531
Kerala	3466	4854	6409	6830	8074	7965	10737
Madhya Pradesh	1700	2760	3014	3525	3935	4368	5061
Maharashtra	6383	9342	11672	12300	14501	15153	18762
Manipur	33	29	32	29	29	30	44
Meghalaya	neg.	1	1	1	Neg.	Neg.	Neg
Nagaland	neg.	neg.	neg.	neg.	Neg.	Neg.	Neg
Orissa	528	748	1027	1061	1410	1467	1781
Punjab	1085	1220	1383	1534	1811	2067	2345
Rajasthan	1666	2244	3055	3439	3799	4226	5768
Tamil Nadu	8398	8407	10292	11296	12230	16416	19766
Tripura	21	38	61	72	72	75	107
Uttar Pradesh	3584	4637	6641	8226	9317	11144	13373
West Bengal	3474	4366	5459	7413	7926	8716	10883
(b) Union Territories							
Chandigarh	34	34	32	35	37	38	28
Delhi	1291	1859	2243	2384	2689	3258	3923
Goa	502	558	887	1054	1101	1144	1507
Total (3)	46164	61864	78943	88615	100761	116105	142772
GRAND TOTAL	47285	62804	82190	93516	109878	126295	156409

XV. TRANSPORTATION

Tonnage of Indian Tankers Fleet (DWT in '000').

Year*	Oil Tanker		Ore/Oil Carrier		Total	
	No. of Tankers	DW Tonnage	No. of Ships	DW Tonnage	No. of Ships	DW Tonnage
1.	2.	3.	4.	5.	6.	7.
		(A) Coastal Tankers				
1970	5	74.1	--	--	5	74.1
1975	9	137.6	--	--	9	137.6
1976@	9	137.6	--	--	9	137.6
1977@	9	137.2	--	--	9	137.2
1978@	8	126.8	--	--	8	126.8
1979@	9	132.9	--	--	9	132.9
1980@	10	158.5	--	--	10	158.5
1981@	16	247.7	--	--	16	247.7
1982@	18	300.6	--	--	18	300.6
1983@	18	300.6	--	--	18	300.6
1984@	18	300.6	--	--	18	300.6
1985**	18	306.1	--	--	18	306.1
		(B) Overseas Tankers				
1970	7	409.9	9	381.5	16	791.4
1975	20	1542.8	11	877.2	31	2420.0
1976	22	1840.6	14	1237.4	36	3078.0
1977@	23	1871.1	14	1237.8	37	3108.9
1978@	23	1871.1	17	1573.4	40	3444.5
1979@	22	1850.6	17	1573.4	39	3424.0
1980@	22	1850.6	16	1484.7	38	3335.3
1981@	23	1879.3	16	1484.7	39	3364.0
1982@	26	2034.1	16	1484.7	42	3518.8
1983@	25	1997.4	16	1484.7	41	3482.1
1984@	32	2426.9	17	1549.7	49	3976.6
1985**	37	2584.2	11	1222.8	48	3807.0
		(C) All Tankers.				
1970	12	484.0	9	381.5	21	865.5
1975	29	1680.4	11	877.2	40	2557.6
1976	31	1978.2	14	1237.8	45	3215.6
1977@	32	2008.3	14	1237.8	46	3246.1
1978@	31	1997.9	17	1573.4	48	3571.3
1979@	31	1983.5	17	1573.4	48	3556.9
1980@	32	2009.1	16	1484.7	48	3493.8
1981@	39	2127.0	16	1484.7	55	3611.7
1982@	44	2334.7	16	1484.7	60	3819.4
1983@	43	2298.0	16	1484.7	59	3782.7
1984@	50	2727.5	17	1549.7	67	4277.2
1985**	55	2890.3	11	1222.8	66	4113.1

* = As on 31st December of each year. @ = DWT in Metric Tonnes.
** = DWT in MT as on 31.3.1986.
Source:- Ministry of Transport.

INDIAN TANKER FLEET AS ON 31.3.1986.

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
1. COASTAL OIL TANKERS			
A. The Shipping Corpn.of India Ltd.Bombay			
1. m.t. Visvesvaraya	1973	11094	16450
2. m.t. Sarojini Naidu	1975	10759	16440
3. m.t. Bhagat Singh	1974	10759	16540
4. m.t. Rafi Ahmed Kidwai	1975	15035	24439
5. m.t. Jai Narayan Vyas	1975	15035	24529
6. m.t. C.V. Raman	1981	27484	41123
7. m.t. Homi Bhaba	1982	27848	41123
B. The Varun Shipping Co.Ltd.Bombay			
8. m.t. Meghdoot	1973	2995	6102
9. m.t. Vayudoot	1980	3924	7012
10. m.t. Premdoot	1972	3662	6145
11. m.t. Pavandoot	1971	16486	26042
C. The Essar Shipping Ltd.,Bombay			
12. m.t. Nand Smiti	1982	3900	6700
13. m.t. Nand Kala	1972	3827	6703
14. m.t. Nand Kishore	1981	11153	19500
15. m.t. Nand Hari	1981	11135	19604
16. m.t. Nand Kavita	1970	15098	25604
D. The Sagar Lines (India) P.Ltd.,Calcutta			
17. m.t. Sagar Tarani	1965	497	712
E. M/s Seatrans Shipping Co.,Bombay			
18. m.t. Raj Sevak	1966	750	1356
TOTAL (Coastal Tankers)		191077	306124
2. OVERSEAS TANKERS			
A. The Shipping Corpn. of India Ltd.,Bombay			
1. m.t. Dadabhai Naroji	1977	15045	24400
2. m.t. Aurobindo	1976	15045	24411
3. m.t. Kolandia	1976	15045	24490
4. m.t. Major Hoshiar Singh PVC	1985	28704	40700
5. m.t. Lance Naik Albert Ecca PVC	1985	28704	40848
6. m.t. Subedar Joginder Singh PVC	1984	37855	61755
7. m.t. Major Dhan Singh Thapa PVC	1984	37855	61792
8. m.t. Naik Jadunath Singh PVC	1984	37855	61801
9. m.t. Company Havildar Major Piru singh PVC	1984	37855	61801
10. m.t. Captain Gurubachan Singh Salaria PVC	1984	37855	91801

Contd.....

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
11. m.t. Lance Naik Karan Singh PVC	1984	37855	61807
12. m.t. Major Shaitan singh PVC	1985	37855	61840
13. m.t. Major Somnath Sharma PVC	1984	37855	61864
14. m.t. Havildar Abdul Hamid PVC	1985	37855	61802
15. m.t. Colonel Ardeshir Burzore Tarapore PVC	1985	37855	61802
16. m.t. Flying Office Nirmal Jit Singh Shekhon PVC	1985	28704	40700
17. m.t. Lt.Arun Khetrapal PVC	1985	28074	40828
18. m.t. Lt.Bama Raghoba Pana PVC	1984	37855	61865
19. m.t. Lal Bahadur Shastri	1970	48441	87170
20. m.t. Vivekananda	1974	51717	89371
21. m.t. Satyamurthi	1975	51533	89351
22. m.t. Netaji Subhash Bose	1973	51526	89392
23. m.t. Lok Manya Tilak	1975	51535	89411
24. m.t. B.R.Ambedkar	1974	51718	89454
25. m.t. Chattrapati Shivaji	1974	51718	89490
26. m.t. Rajendra Prasad	1975	63460	115723
27. m.t. Zakir Hussain	1975	63460	115853
28. m.t. Kanchanjunga	1975	139820	276755
29. m.t. Koyali	1976	139820	276800
B. The Great Eastern Shipping Co.Ltd.,Bombay			
30. m.t. Jag Prakash	1974	15849	25480
31. m.t. Jag Palak	1985	18542	27402
32. m.t. Jag Preeti	1981	21206	28679
33. m.t. Jag Pari	1982	20991	29139
34. m.t. Jag Priya	1975	20415	32878
35. m.t. Jag Prabhat	1985	18542	27398
36. m.t. Jag Pragati	1985	18542	27400
C. The Ratnakar Shipping Co.Ltd.Calcutta			
37. m.t. Ratna Abha	1982	40613	60725
TOTAL (oil Tankers)		1515804	2584163
(ii) ORE OIL BULK CARRIERS			
A. The Shipping Corpn. of India Ltd.,Bombay			
1. m.v. Vallabhbhai Patel	1977	62563	113926
2. m.v. Motilal Nehru	1973	62857	114086
3. m.v. Vallathol	1976	62563	114152
4. m.v. Abul Kalam Azad	1974	62857	114340
5. m.v. Maharshi Dayanand	1978	66926	123450
6. m.v. Maharashi Karve	1978	66926	123450
B. The Great Eastern Shipping Co.Ltd.,Bombay			
7. m.v. Jag Laadki	1972	55540	103124
8. m.v. Jag Laxmi	1976	66723	121423
9. m.v. Jag Leela	1976	66733	125085
C. The Scindia Steam Nav.Co.Ltd.,Bombay			
10. m.v. Walchand	1973	57793	104750
11. m.v. Nand Shivchand	1982	37700	65000
TOTAL (Ore Oil Tankers)		669181	1222786
TOTAL (OVERSEAS TANKERS)		2184985	3806949
GRAND TOTAL (COASTAL AND OVERSES TANKERS)		2376062	4113073

Source: Department of Surface Transport, Ministry of Transport.

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1965-66 TO 1985-86.

(Million Tonnes)

Name of the Port	Year	Total Traffic	POL Traffic	POL as %age of total traffic at the port
1.	2.	3.	4.	5.
Calcutta/Haldia*	1965-66	9.84	1.53	15.6
	1969-70	6.89	1.53	22.5
	1973-74	6.33	1.97	31.1
	1977-78	7.55	3.41	42.2
	1979-80	8.56	4.58	53.5
	1981-82	9.75	4.55	46.7
	1982-83	10.5	4.59	43.7
	1983-84	10.28	4.75	46.2
	1984-85	10.19	5.02	49.3
	1985-86	12.13	6.06	50.0
Bombay	1965-66	18.12	9.35	51.6
	1969-70	15.04	8.60	57.2
	1973-74	18.46	11.05	59.9
	1977-78	16.90	9.86	58.3
	1979-80	16.57	7.84	47.3
	1981-82	19.63	10.37	52.8
	1982-83	24.85	16.91	68.0
	1983-84	24.74	16.65	67.3
	1984-85	25.20	16.93	67.2
	1985-86	24.92	15.47	64.7
Madras	1965-66	4.87	0.93	19.1
	1969-70	6.44	2.24	34.8
	1973-74	7.75	3.47	44.8
	1977-78	8.07	3.47	43.0
	1979-80	9.99	3.73	37.3
	1981-82	11.41	4.59	40.2
	1982-83	12.41	5.81	46.8
	1983-84	13.32	6.58	49.4
	1984-85	15.01	6.93	46.2
	1985-86	18.15	8.93	49.2
Cochin	1965-66	2.87	1.04	36.2
	1969-70	4.79	3.56	74.3
	1973-74	3.72	2.50	67.2
	1977-78	5.17	3.81	73.7
	1979-80	5.47	3.87	70.8
	1981-82	5.51	4.18	75.9
	1982-83	5.72	4.33	75.7
	1983-84	5.13	3.80	74.1
	1984-85	3.92	2.63	67.1
	1985-86	5.11	3.83	75.0
Kandla	1965-66	2.51	0.93	37.1
	1969-70	2.11	0.98	46.4
	1973-74	3.12	1.50	51.3
	1977-78	3.82	2.75	72.0
	1979-80	7.27	5.45	75.0
	1981-82	9.53	7.16	75.1
	1982-83	12.65	10.74	84.9
	1983-84	14.16	11.36	80.2
	1984-85	15.75	11.94	75.8
	1985-86	16.48	12.34	74.9

* = Kandla POL traffic includes traffic handled at Vadinar.

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1965-66 TO 1985-86. (Million Tonnes)

Name of the Port	Year	Total Traffic	POL Traffic	POL as %age of total traffic at the port
1.	2.	3.	4.	5.
Vishakapatnam	1965-66	4.38	2.01	45.9
	1969-70	8.30	1.94	23.4
	1973-74	7.95	1.93	24.3
	1977-78	9.69	1.74	18.0
	1979-80	10.23	1.94	19.0
	1981-82	10.85	2.11	19.4
	1982-83	10.18	2.10	20.6
	1983-84	11.35	4.03	35.5
	1984-85	12.87	4.47	34.7
	1985-86	15.91	6.27	39.4
Mormugao	1965-66	7.86	0.09	1.1
	1969-70	9.03	0.15	1.1
	1973-74	14.34	0.55	4.5
	1977-78	11.28	0.62	5.5
	1979-80	14.80	0.73	4.9
	1981-82	14.89	0.66	4.4
	1982-83	12.76	0.78	6.1
	1983-84	13.22	1.02	7.7
	1984-85	14.51	0.90	6.2
	1985-86	16.10	0.98	6.1
Paradip	1965-66	--	--	--
	1969-70	1.75	--	--
	1973-74	2.29	--	--
	1977-78	2.74	--	--
	1979-80	2.31	--	--
	1981-82	1.17	--	--
	1982-83	1.81	--	--
	1983-84	1.59	--	--
	1984-85	2.14	--	--
	1985-86	3.33	--	--
Port of Tuticorin	1977-78	0.63	0.35	55.6
	1979-80	2.41	0.44	18.3
	1981-82	2.69	0.47	17.5
	1982-83	3.23	0.52	16.1
	1983-84	3.55	0.43	13.5
	1984-85	3.77	0.51	13.5
	1985-86	4.22	0.34	8.1
New Mangalore	1977-78	0.38	0.20	52.6
	1979-80	0.90	0.21	23.3
	1981-82	1.64	0.36	22.0
	1982-83	2.27	0.35	15.4
	1983-84	2.84	0.35	12.3
	1984-85	3.38	0.44	13.0
	1985-86	3.69	0.41	11.1
GRAND TOTAL	1965-66	50.46	15.88	31.5
	1969-70	54.35	19.02	35.0
	1973-74	63.96	23.07	36.1
	1977-78	66.23	26.21	39.6
	1979-80	78.49	28.78	36.7
	1981-82	88.06	34.44	39.1
	1982-83	96.12	46.16	48.0
	1983-84	100.18	48.97	48.9
	1984-85	106.74	49.77	46.6
	1985-86	120.04	54.63	45.5

SOURCE: Ministry of Transport.

ESTIMATED FREIGHT PAID ON IMPORTS@ OF CRUDE OIL/POL PRODUCTS TRANSPORTED BY INDIAN/FOREIGN FLAG TANKERS DURING THE YEARS 1983 TO 1985

Fraight in Rs./Crores. Qty. in Million Tonns

	Products/Tankers	1983		1984		1985	
		Qty.	Fraight	Qty.	Fraight	Qty.	Fraight
A.	Crude Oil						
	Indian Tankers	13.26	90.18	14.22	87.94	19.48	121.80
	Foreign tankers	2.26	12.69	0.84	4.54	0.03	0.12
	Total (A)	15.52	102.87	15.06	92.48	19.51	121.92
B.	POL Products						
	Indian Tankers	0.94	21.63	1.02	24.19	0.88	18.56
	Foreign tankers	3.25	27.04	4.35	26.37	2.60	20.35
	Total (B)	4.19	48.67	5.37	50.56	3.48	38.91
C.	Crude Oil/POL Products						
	Indian Tankers	14.20	111.81	15.24	112.13	20.36	140.36
	Foreign tankers	5.51	39.73	5.19	30.91	2.63	20.47
	Total (C)	19.71	151.54	20.43	143.04	22.99	160.83

@ Quantity as per Bill of lading.

COASTAL MOVEMENT OF PETROLEUM PRODUCTS
(Quantity moved to Indian Ports)

Year	Quantity carried (in Thousand Tonns) By			Freight paid (Estimated) (Rs. Million)
	Indian Flag Vessels	Foreign Flag Vessels	Total	
1968	754.71	2442.61	3197.32	60.04
1969	1089.76	1941.68	3031.44	54.20
1970	1131.23	1695.36	2826.59	65.79
1971	1190.04	1656.50	2846.54	82.79
1972	1452.89	1138.18	2591.07	75.50
1973	1477.73	1168.25	2645.98	86.97
1974	1640.71	1055.65	2696.35	136.59
1975	2191.35	177.62	2368.97	117.52
1976	2060.77	20.65	2081.42	84.63
1977	2342.19	--	2342.19	101.37
1978	2823.67	--	2823.67	146.06
1979	2889.00	--	2889.00	194.61
1980	2713.78	--	2713.78	254.60
1981	3200.63	--	3200.63	309.86
1982	2671.27	--	3061.28	306.13
1983	3312.44	--	3312.44	339.70
1984	4104.71	--	4104.71	378.07
1985	4119.25	--	4119.25	411.26

* Includes freight paid on demurrage and dead freight paid.

MOVEMENT OF POL TRAFFIC ON RAILWAYS SINCE-1970-71

YEAR	Tonnes Originating ('000'MTS)	Earnings ('000'Rs.)	Average lead (Kms)	Earnings (Paise/ Tonnes Kms)	Average Fraight (Col. 3 divided 2 (tonnes/Rs.)
1.	2.	3.	4.	5.	6.
1970-71	8857	464081	594	9.1	52.40
1971-72	10063	523049	593	8.8	51.98
1972-73	10181	550982	614	8.8	54.12
1973-74	9994	555560	638	8.7	55.59
1974-75	10751	723192	642	10.5	67.27
1975-76	11663	860925	605	12.2	73.82
1976-77	12395	1038462	609	13.8	83.78
1977-78	13062	1120693	631	13.6	85.80
1978-79	14301	1324332	698	13.3	92.60
1979-80	14266	1497510	729	14.4	104.97
1980-81	14954	1835693	780	15.7	122.76
1981-82	16555	2848050	731	23.5	172.04
1982-83	17342	3588169	647	32.0	206.91
1983-84	17949	4052635	597	37.8	225.79
1984-85	18169	4157626	563	40.6	228.83

RAIL FREIGHT IN RESPECT OF PETROLEUM PRODUCTS;

RS/KL

Distance. Kms.	1.4.1980		1.4.1981		14.8.1981		1.1.1982 Onward	
	Non dangerous POL	Dangerous POL	Non dangerous POL	Dangerous POL	Non dangerous POL	dangerous POL	Non dangerous POL	Dangerous POL
1.	2.	3.	4.	5.	6.	7.	8.	9.
100	24.40	38.20	34.30	56.60	42.40	64.90	46.60	71.40
300	47.70	76.20	67.20	113.40	83.80	130.30	92.20	143.30
500	68.50	110.10	96.70	164.00	121.30	188.70	133.40	207.60
800	111.80	181.10	158.10	270.00	198.70	310.60	228.50	357.20
1000	132.90	215.50	187.80	321.40	236.40	370.00	271.90	425.50
1500	181.60	295.50	257.10	441.10	323.80	508.20	372.40	584.40
2000	223.50	364.40	316.60	544.20	399.40	627.10	459.30	721.20
2500	256.30	418.30	362.70	624.60	457.90	720.09	526.60	828.00

Non-dangerous POL:- Include HSDO, LDO and other Petroleum and Hydro-carbons Oil (Except Kerosene Oil).

Dangerous POL :- Include Motor Spirit, Benzene and other dangerous mineral oils.

SOURCE :- Ministry of Railways.

Crude O 1 & Product Pipelines in India as on 1.4.1986

Pipelines	Owned by	Length in KMS	Diametre in inches
1.	2.	3.	4.
1. CRUDE PIPELINES (ONSHORE)			
Ankleshwar - Koyali (Baroda)	ONGC	94.77	16"
Kalol - Nawagam	ONGC	48.90	12 3/4"
Nawagam Koyaoli	ONGC	77.63	14"
Sanand - Kalol	ONGC	12.52	8 5/8"
Sobhashan - North Kadi	ONGC	20.23	8 5/8"
North Kadi - Kalol	ONGC	35.59	12 3/4"
Jhalora - Sanand	ONGC	9.36	8 5/8
Lakwa - Moran	ONGC	17.50	12 3/4"
Rudrasagar - Lakwa	ONGC	38.00	8 5/8
Geleki - Dikhow	ONGC	18.90	8 5/8
Goleki - Jorhat	ONGC	48.40	14"
Borhollah - Jorhat pipeline	ONGC	42.80	12 3/4"
Digboi oilfield-Digboi Refinery	OIL	12.50	6"
Digboi oilfield-Digboi Refinery	OIL	10.4	4"
Nahorkatiya-Digboi	OIL	35.0	8"
Nahorkatiya-Gauhati loopline	OIL	100.0	16"
Nahorkatiya-Gauhati	OIL	401.0	16"
Gauhati-Barauni	OIL	757.0	14"
Gauhati-Barauni loopline	OIL	112.0	16"
Nararabet to Salaya tank	IOC	5.70 each	42"
Farm (2 lines)			
Salaya-Viramgam	IOC	275.00	28"
Viramgam-Koyali	IOC	141.00	18"
Viramgam-Mathura	IOC	803.00	24"
North Kalol. GGS-I to S. Kadi	ONGC	5.10	12 3/4"
Santhol to North Kadi	ONGC	4.52	12 3/4"
Jotana to Santhol	ONGC	2.73	4 1/2"
Viraj to South Kadi	ONGC	5.83	8 5/8"
Total Onshore		3141.08	

Crude Oil & Product Pipelines in India as on 1.4.1986. (Contd...)

Pipelines	Owned by	length (in KMS)	Diametre (in inches)
1.	2.	3.	4.
II. CRUDE PIPELINES (OFFSHORE)		275.59	
BH (platform 'P') to Uran	ONGC	203.00	30"
Uran-Trambay	ONGC	24.00	36"
Trombay-Bhutcher	ONGC	4.40	36"
HRA-R-12	ONGC	38.92	12"
SBM to Nararabet	IOC	5.27	42"
Total Crude Pipelines (I+II)		3416.67	
PRODUCT PIPELINES			
Gauhati-Siliguri	IOC	435.0	8 5/8"
Digboi-Tinsukia	IOC	35.47	8 5/8"
Digboi-Tinsukia	IOC	38.35	6"
Digboi-Tinsukia	IOC	35.12	6"
Digboi-Tinsukia	IOC	34.39	4"
Koyali-Ahmedabad	IOC	115.70	8 5/8"
Barauni-Kanpur	IOC	668.78	12 3/4"
Haldia-Mourigram-Rajbandh	IOC	268.58	12 3/4"
Haldia-Barauni	IOC	524.83	12 3/4"
Mathura-Delhi	IOC	147.00	16"
Delhi-Ambala	IOC	202.00	14"
Ambala-Jullunder	IOC	164.00	12 3/4"
Ernakulam Ins. to FACT	BPCL	13.00	4"
BPCL (R) to Wadibunder Ins.	BPCL	22.00	12"
HPCL (R) to BPCL (R)	BPCL	3.00	8"
BPCL (R) to HPCL (R)	BPCL	1.50	8"
BPCL (R) to Pirpau	BPCL	4.50	14"
Total Product Pipeline		2713.22	
III. GAS PIPELINES (OFFSHORE)			
BH (Platform 'F') to Uran	ONGC	203.00	26"
Uran-Trambay	ONGC	24.00	18"
Uran-MSEB	ONGC	6.00	12"
Uran-Thal	ONGC	21.00	26"
South Bassein-Uran	ONGC	216.00	36"
Total (Offshore)		470.00	

Crude Oil & Product Pipelines in India as on 1.4.1986. (Contd...)

Pipelines	Owned by	length (in KMS)	Diametre (in inches)
1.	2.	3.	4.
IV. GAS PIPELINES (ONSHORE)		352.42	
Cambay-Dhuwaran	ONGC	25.00	14"
Ankleshwar-Uttaran	ONGC	38.25	16"
Ankleshwer-Baroda	ONGC	96.55	14"
Nawagam-Calico Mills	ONGC	24.50	8 5/8"
Sanand-Kalol	ONGC	12.67	6 5/8"
Kalol-IFFCO (FG)	ONGC	2.51	8 5/8"
Kalol-IFFCO (AS)	ONGC	2.51	12 3/4"
Sobhashan-Dudh Sagar	ONGC	9.20	8 5/8"
Dabka-Saraswani Platform	ONGC	10.50	4 1/2"
North Kadi to S. Kadi	ONGC	16.40	8 5/8"
Jhalora to Sanand	ONGC	9.27	8 5/8"
Jotna Santhal-N. Kadi	ONGC	7.17	8 5/8"
Motwan to Ankleshwer	ONGC	2.89	8 5/8"
Kalol-Kadi GIDC	ONGC	19.40	8 5/8"
Ramol-Nawagam	ONGC	17.45	6 5/8"
Nawagam to Amul Dairy	ONGC	50.0	4 1/2"
Uttran Kawas	ONGC	24.50	12 3/4"
Hatira-Karibhco	ONGC	4.00	16"
Uran-Hatira	ONGC	14.00	36"
ASEB Gas Pipeline	ONGC	16.15	12 3/4"
From Lakwa to Maibella			
Digboi-Duliajan	OIL	42.00	10"
Total Gas Pipelines (III+IV)		914.92	
V. LPG Pipelines (OFFSHORE)	ONGC		
Uran-Trombay		24.00	8"
VI. NGL Pipeline (OFFSHORE)			
Uran-Trombay	ONGC	24.00	8"
Grand Total (I to VI)		7092.81	

XVI. MARKETING NET WORK

Retail outlets in India as on 1st January of each year

(Number)

Year	Nos.	B/Shell/ BPCL	ESSO/ HPCL	CALTEX/ HPCL(VMU)	IOC	IBP	AOC/ AOD	TOTAL
1.	2.	3.	4.	5.	6.	7.	8.	9.
1968	Nos.	3683	1955	1437	1516	229	119	8939
	%	41.2	21.9	16.1	16.9	2.6	1.3	100
1969	Nos.	3700	1948	1396	2131	223	124	9522
	%	38.8	20.5	14.7	22.4	2.3	1.3	100
1970	Nos.	3577	1922	1392	2655	233	129	9908
	%	16.1	19.3	14.0	26.8	2.4	1.4	100
1971	Nos.	3583	1928	1384	2967	249	144	10255
	%	35.0	18.8	13.5	28.9	2.4	1.4	100
1972	Nos.	3535	1923	1384	3129	297	150	10418
	%	33.9	18.5	13.3	30.0	2.9	1.4	100
1973	Nos.	3478	1920	1372	3274	440	155	10639
	%	32.7	18.0	12.9	30.8	4.1	1.5	100
1974	Nos.	3262	1887	1359	3349	487	164	10508
	%	31.0	18.0	12.9	31.9	4.6	1.6	100
1975	Nos.	3173	1867	1206	3546	525	163	10480
	%	30.3	17.8	11.5	33.8	5.0	1.6	100
1976	Nos.	3157	1872	1201	3583	619	164	10596
	%	29.8	17.7	11.3	33.8	5.8	1.6	100
1977	Nos.	3183	1916	1200	3804	717	166	10986
	%	29.0	17.5	10.9	34.6	6.5	1.5	100
1978	Nos.	3241	1965	1198	4051	850	168	11473
	%	28.3	17.1	10.4	35.3	7.4	1.5	100
1979	Nos.	3288	1966	1201	4150	998	173	11806
	%	27.8	16.9	10.2	35.2	8.4	1.5	100
1980	Nos.	3296	3198@		4231	975	173	11873
	%	27.8	26.9		35.6	8.2	1.5	100
1981	Nos.	3308	3225@		4333	1001	175	12042
	%	27.5	26.8		36.0	8.3	1.4	100
1982	Nos.	3314	3247@		4413	1019	178	12171
	%	27.2	26.7		36.2	8.4	1.5	100
1983	Nos.	3232	3124@		4504	1024	186	12070
	%	26.8	25.9		37.3	8.5	1.5	100
1984	Nos.	3378	3391@		4654	1051	190	12664
	%	26.7	26.8		36.7	8.3	1.5	100
1985	Nos.	3442	3451@		4707	1062	202	12864
	%	26.7	26.8		36.6	8.3	1.6	100
1986	Nos.	3514	3545		4848	1087	215	13209
	%	26.7	26.8		36.7	8.2	1.6	100

Note:- 1. % = Percentage
2. @ = Includes HPCL(VMU) retail outlets.
3. The data excludes consumers outlets

STATE-WISE NUMBER OF RETAIL OUTLETS, MPDCs/FFCs, LDO/SKO DEALERS AND LPG DISTRIBUTORS AS ON 1.4.1986

(Numbers)

State/Union Territories	Retail outlets	MPDC/ FFC	LDO/SKO dealers	LPG distributors
1.	2.	3.	4.	5.
STATES				
1. Andhra Pradesh	1079	57	585	285
2. Arunachal Pradesh	18	2	12	2
3. Assam	268	1	313	67
4. Bihar	788	28	329	84
5. Bhutan	8	--	2	--
6. Gujarat	875	25	367	227
7. Haryana	436	28	131	70
8. Himachal Pradesh	61	2	16	15
9. Jammu & Kashmir	100	1	26	29
10. Karnatka	827	20	280	165
11. Kerala	633	7	232	104
12. Madhya Pradesh	782	38	313	154
13. Maharashtra	1391	71	556	430
14. Manipur	14	3	26	7
15. Meghalaya	33	--	27	10
16. Mizoram	8	1	9	2
17. Nagaland	19	1	11	6
18. Orissa	284	13	167	54
19. Punjab	876	33	221	98
20. Rajasthan	725	54	216	82
21. Sikkim	7	--	7	1
22. Tamil Nadu	1274	26	432	233
23. Tripura	27	1	37	5
24. Uttar Pradesh	1649	107	588	273
25. West Bengal	926	22	389	160
UNION TERRITORIES:				
26. A.N. Islands	1	--	1	--
27. Chandigarh	17	--	9	17
28. D.N. Haveli	1	--	--	1
29. Delhi	232	1	68	137
30. Goa, Daman & Diu	63	--	19	19
31. Pondicherry	24	--	9	5
GRAND TOTAL:	13446	542	598	2742

STATE-WISE NUMBER OF LPG DOMESTIC CUSTOMERS AS ON 1.4.1986

(Number)

STATE/UTS	AOD	IOC	HPCL	BPCL	TOTAL
STATES					
1. Andhra Pradesh	--	338066	470004	109178	917248
2. Assam	81053	69497	--	--	150550
3. Bihar	--	286650	20830	509	307989
4. Gujarat	--	664098	185789	222083	1071970
5. Haryana	--	151911	26778	44717	223406
6. Himachal Pradesh	--	44971	1880	--	46851
7. Jammu & Kashmir	--	15371	48229	549	64149
8. Karnataka	--	204362	240601	112320	557283
9. Kerala	--	221754	23947	56256	301957
10. Madhya Pradesh	--	358291	200262	75984	634537
11. Maharashtra	--	34058	1024192	1098594	2156824
12. Manipur	7695	7274	--	--	14969
13. Meghalaya	7943	5413	--	--	13356
14. Mizoram	5129	4520	--	--	9649
15. Nagaland	3750	5457	--	--	9207
16. Orissa	--	56765	56301	187	113253
17. Punjab	--	225013	40511	81488	347012
18. Rajasthan	--	159428	79759	58016	297203
19. Sikkim	--	3227	--	--	3227
20. Tamil Nadu	--	843850	61723	95873	1001446
21. Tripura	4870	5047	--	--	9917
22. Uttar Pradesh	--	765424	60131	155232	980787
23. West Bengal	--	392554	94505	331	487390
UNION TERRITORIES:					
24. A & N Island	--	--	--	--	--
25. Arunachal Pradesh	--	1965	--	--	1965
26. Bhutan	--	--	--	--	--
27. Chandigarh	--	56850	19346	2157	78363
28. D.N. Haveli	--	--	2160	--	2160
29. Delhi	--	507974	97415	161432	766821
30. Goa, Daman & Diu	--	--	41724	32628	74352
31. Lakshadeep	--	--	--	--	--
32. Pondicherry	--	18938	61	1544	20543
TOTAL:	110440	5448718	2796148	2309078	10664384

XVII. ENERGY

GROSS PRODUCTIONS OF ENERGY BY VARIOUS SOURCES IN INDIA

Year	Coal & Lignite			Hydro-carbon			Power Million (KWH)			
	Coal (M.T.)	Lignite (M.T.)	Total (M.T.)	Natural Gas(Mn. Cubic metres)	Curde Petroleum '000' Tonnes	Petroleum Products @ '000' Tonnes	Thermal	Hydel.	Nuclear	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1960-61	55.67	0.05	55.72	---	448	6077	9100	7837	---	16937
1965-66	67.73	2.57	70.30	507	3473	10081	19641	16734	---	36375
1970-71	72.95	3.39	76.34	1445	6822	18333	28162	25248	2417	55827
1971-72	72.42	3.72	76.14	1535	7299	19867	31713	28024	1189	60926
1972-73	77.22	2.89	80.11	1565	7321	19092	36217	27196	1133	64546
1973-74	78.17	3.32	81.49	1713	7189	20724	35321	28972	2396	66689
1974-75	88.41	2.94	91.35	2041	7684	20800	40109	27875	2206	70190
1975-76	99.68	3.03	102.71	2368	8448	22055	43303	33302	2626	79231
1976-77	104.02	4.01	105.03	2428	8898	22732	50245	34836	3252	88333
1977-78	101.00	3.59	104.59	2839	10763	24670	52495	37961	1740	92196
1978-79	101.97	3.27	105.24	2811	11633	25671	53420	47138	2770	103328
1979-80	103.90	3.05	106.95	2767	11766	27228	57155	45494	2876	105525
1980-81	114.01	4.80	118.81	2358	10507	25436	61301	46542	3001	110844
1981-82	124.23	5.88	130.11	3851	16194	29717	69392	49597	3021	122010
1982-83	130.50	6.40	136.90	4936	21063	32761	79880	48309	2022	130211
1983-84	138.22	6.64	144.92	5961	26020	34793	86535	49867	3494	139896
1984-85	147.40	7.11	154.54	7241	28990	35161	98770	53785	4078	156633
1985-86*	154.24	7.13	161.37	8134	30168	41156	114119	50933	4985	170037

* = Provisional @ = Includes RBF

Source:- I) Central Electricity Authority and Economic Survey.
II) Coal Statistics - Coal Controller's Organisation, Department of Coal.

Sectoral Shares In Commercial Energy Consumption 1960-61 to 1984-85

	Total commercial energy			share of specific fuels in 1984-85		
	60-61	79-80	84-85	Oil	Electricity	Coal
Household	20.6	15.7	18.2	29	11	3
Agriculture	3.6	9.4	9.8	10	16	-
Industry	39.2	38.2	36.4	5	62	78
Transport	33.8	32.8	31.4	56	2	13
Others	2.8	3.9	4.2	-	9	6
	100.0	100.0	100.0	100	100	100

SOURCE: The Seventh Five Year Plan 1985-90

Estimates of Commercial and Non-commercial Energy Requirements In 1999-2000

Energy	Sector of Consumption					
	Household	Industry	Transport	Agriculture	Other	Total
Electricity (Billion RWH)	81.4-83.5	249.0-282.8	8.28-8.9	40.9-41.5	44.42-48.0	424.0-465.0
Coal (Million tonnes)	14.0	161.0	7.81	-	5.19	188.0*
Oil (Million tonnes)	17.73	12.0	29.86	8.1	5.0	72.7
Fuelwood (" " ")	191.6	-	-	-	-	191.6
Dungcake (" " ")	105.0	-	-	-	-	105.0
Vegetable waste (" " ")	59.0	-	-	-	-	59.0

* Net of coal consumed in the power sector.

SOURCE: The Seventh Five Year Plan 1985-90.

XVIII - GENERAL

Contribution of Petroleum Sector to Net National Product (at Current Prices)

(Rs./Crores)

Year	Petroleum & Natural Gas	Petroleum Refining	Total	N.N.P. at current price	% of (Col.4 to (Col. 5)
1.	2.	3.	4.	5.	6.
1970-71	27.72	47.84	75.56	34235	0.22
1971-72	32.43	59.33	91.76	36582	0.25
1972-73	32.12	N.A.		40317	
1973-74	44.63	43.97	88.60	50468	0.18
1974-75	87.10	84.47	171.57	59505	0.29
1975-76	92.14	89.78	181.92	62302	0.29
1976-77	118.25	153.35	271.60	66924	0.41
1977-78	166.26	194.06	360.32	75674	0.48
1978-79	221.10	113.77	334.87	81432	0.41
1979-80	259.62	134.64	394.26	88927	0.44
1980-81	174.48	159.66	334.14	106175	0.31
1981-82	1167.00	222.27	1389.27	120806	1.15
1982-83	2003.01	412.85	2415.86	132470	1.82
1983-84	2976.28	N.A.	N.A.	159598	

Gross Domestic Product of Crude Petroleum & Natural Gas and Coal and Lignite at current prices.

(Rs. Lakhs)

Year	Crude Petroleum & Natural Gas	Coal & Lignite
1976-77	18978	51671
1977-78	27278	51504
1978-79	33148	50615
1979-80	37221	75908
1980-81	33177	103357
1981-82	136979	122695
1982-83	234249	143634
1983-84	345007	157515

XIX. INTERNATIONAL PETROLEUM STATISTICS

World Proved reserves of Oil and Natural Gas at End 1985

Country	Crude oil			Natural Gas		
	Reserves (Billion Tonnes)	Percentage share of total	R/P Ratio **	Reserves (Trillion cubic metres)	Percentage share of total	R/P ratio **
1.	2.	3.	4.	5.	6.	7.
North America	5.6	6.0	9.5	8.4	8.6	15.5
U.S.A.	4.6	5.0	9.1	5.6	5.7	11.9
Canada	1.0	1.0	12.4	2.8	2.9	38.0
Latin America	11.9	11.9	35.4	5.4	5.4	71.0
Argentina	0.3	0.3	14.1	0.7	0.7	64.6
Brazil	0.3	0.3	10.4	-	-	-
Ecuador@	0.2	0.2	16.1	0.1	0.1	*
Mexico	6.9	7.0	46.0	2.2	2.2	70.0
Venezuela	3.7	3.6	40.8	1.7	1.7	96.5
Others	0.5	0.5	14.8	0.7	0.7	-
Western Europe	3.4	3.7	18.4	6.1	6.5	35.3
Norway	1.4	1.5	35.1	2.9	3.0	*
United Kingdom	1.7	1.8	13.6	0.6	0.9	16.5
Others	0.3	0.4	15.1	-	-	-
Middle East	54.0	56.3	*	24.2	24.6	*
Abu Dhani@	4.1	4.4	98.3	0.6	0.6	88.6
Dubai	0.2	0.2	10.0	0.1	0.1	*
Iran@	6.5	6.8	59.1	13.3	13.5	*
Iraq@	5.9	6.2	84.2	0.8	0.8	*
Kuwait@	12.4	12.7	*	0.9	0.9	*
Neutral Zone	0.8	0.8	41.1	-	-	-
Oman	0.5	0.6	21.6	-	-	-
Qatar@	0.4	0.5	29.7	4.2	4.3	*
Saudi Arabia@	23.0	23.8	*	3.4	3.5	*
Syria	0.2	0.2	22.1	-	-	-
Others	+	0.1	14.5	0.9	0.9	*
Africa	7.4	8.1	29.7	5.5	5.7	*
Algeria@	1.1	1.3	25.6	3.0	3.1	86.1
Angola	0.3	0.3	28.7	-	-	-
Egypt	0.5	0.6	12.3	0.2	0.2	43.9
Libya@	2.8	3.0	53.9	0.6	0.6	*
Nigeria@	2.3	2.3	31.0	1.3	1.4	*
Tunisia	0.2	0.3	15.0	-	-	-
Others	0.2	0.3	15.0	0.4	0.4	*
Asia & Australisia	2.5	2.5	15.9	4.6	4.6	50.9
Japan	+	+	16.8	+	+	14.0
Brunei	0.2	0.2	27.1	0.2	0.2	25.5
Indonesia@	1.2	1.2	18.2	1.0	1.0	30.9
Malaysia	0.4	0.4	19.5	1.5	1.5	*
Other S.E.Asia	+	+	9.7	+	+	34.3
India	0.5	0.5	16.6	0.5	0.5	60.3
Other South Asia	+	+	4.9	-	-	-
Australia	0.2	0.2	6.6	0.5	0.5	37.8
New Zealand	+	+	18.5	0.2	0.2	44.2
Total NC World	84.8	88.5	41.5	54.2	55.4	55.4
Centrally Planned Economies(CPEs)	11.0	11.5	14.8	43.8	44.6	60.5
China	2.4	2.6	19.4	0.8	0.9	66.5
U.S.S.R.	8.3	8.6	14.0	42.5	43.2	66.1
Others	0.3	0.3	11.6	0.5	0.5	6.7
TOTAL WORLD	95.8	100.0	34.4	98.0	100.0	57.6
of which OPEC	64.6	67.1	77.0	31.4	32.2	*

* Over 100 years. + Less than 0.05. @ OPEC Member Countries.

** Reserves/Production (R/P)ratio reflects oil reserves remaining at the end of any year divided by the production in that year.The ration shows the length of time that those remaining reserves would last if production were to continue at the then-current level. Source: B.P.Statistical review of world energy,June 1986.

WORLD ESTIMATE CRUDE OIL PRODUCTION 1981-1985

(Million Tonnes)

Country	1981	1983	1984	1985	Percentage Change 1985 over 1984	Percentage Share of Total 1985
1.	2.	3.	4.	5.	6.	7.
North America	482.8	486.8	500.2	500.5	+ 0.1	17.9
USA	72.9	71.7	78.2	77.9	- 0.4	2.8
Canada	555.7	558.5	578.4	578.4	$	20.7
Total N. America						
Latin America						
Argentina	25.5	24.9	24.4	23.3	- 4.3	0.8
Brazil	10.7	17.6	22.2	26.4	+18.6	0.9
Colombia	6.8	7.8	8.6	9.0	+ 4.8	0.3
Ecuador	10.3	11.6	12.6	13.7	+ 8.9	0.5
Mexico	128.3	146.6	150.4	149.6	- 0.6	5.4
Trinidad	10.1	8.2	8.4	9.0	+ 6.9	0.3
Venezuela	112.5	97.0	97.5	90.2	- 7.4	3.2
Others	13.3	12.4	12.8	12.8	$	0.5
Total Latin America	317.5	326.1	336.9	334.0	- 0.9	11.9
Western Europe						
Austria	1.4	1.3	1.2	1.2	- 4.0	$
Denmark	0.8	2.2	2.3	2.9	+24.9	0.1
France	1.7	2.3	2.7	3.2	+19.0	0.1
Italy	1.5	2.2	2.3	2.3	+ 2.6	0.1
Norway	24.9	32.0	36.8	40.6	+10.2	1.4
Turkey	2.4	2.2	2.1	2.1	+ 2.2	0.1
United Kingdom	89.4	114.9	125.9	127.5	+ 1.3	4.6
West Germany	4.5	4.1	4.1	4.1	+ 1.2	0.1
Others	3.0	7.2	7.0	7.3	+ 5.3	0.3
Total W.Europe	129.6	168.4	184.4	191.2	+ 3.8	6.8
Middle East						
Abu Dhabi	54.5	39.3	38.9	41.5	+ 6.6	1.5
Dubai	17.8	16.9	18.3	18.9	+ 3.1	0.7
Iran	65.8	122.4	109.3	110.5	+ 1.0	4.0
Iraq	44.0	54.1	60.3	70.4	+16.8	2.5
Kuwait	48.2	44.7	48.9	45.0	- 8.1	1.6
Neutral Zone	19.4	16.2	21.1	18.7	-11.4	0.7
Oman	16.4	19.6	21.0	25.4	+20.7	0.9
Qatar	20.4	14.7	20.1	14.5	-28.2	0.5
Saudi Arabia	491.3	255.8	233.0	174.8	-25.0	6.3
Others	11.6	11.9	12.3	12.8	+ 3.8	0.5
Total Middle East	789.2	595.6	583.2	532.5	- 8.7	19.2
Africa						
Algeria	46.3	42.9	46.1	44.8	- 2.9	1.6
Egypt	34.1	35.7	42.5	43.4	+ 2.1	1.6
Libya	58.7	53.0	53.0	52.1	- 1.6	1.9
Other North Africa	5.5	5.4	5.6	5.4	- 3.2	0.2
Gabon	7.6	7.8	7.6	7.7	+ 1.0	0.3
Nigeria	71.0	61.0	68.6	72.8	+ 6.1	2.6
Other West Africa	16.5	21.2	25.4	26.4	+ 3.9	0.9
Total Africa	239.7	227.0	248.8	252.6	+ 1.5	9.1

WORLD ESTIMATED CRUDE OIL PRODUCTION 1981-1985 (Contd...)

(Million Tonnes)

Country	1981	1983	1984	1985	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
Asia & Australasia						
Japan	0.4	0.4	0.4	0.5	+20.9	$
Brunei	8.6	8.6	7.9	7.4	- 6.2	0.3
Indonesia	82.2	65.3	68.5	63.2	- 7.8	2.3
Malaysia	12.4	20.2	21.7	20.9	- 3.7	0.7
Other S.E.Asia	0.6	1.3	1.8	3.4	+91.7	0.1
South Asia	16.9	27.2	30.3	32.9	+ 8.5	1.2
of which India	19.0	21.8	25.8	30.2	+17.2	1.1
Total Asia & Austral.	140.1	144.8	156.4	158.5	+ 1.3	5.7
Total NCW	2171.8	2020.4	2088.1	2047.2	- 2.0	73.4
Centrally Planned Economies(CPEs)						
China	101.7	106.0	114.5	124.7	+ 8.9	4.5
USSR	609.0	616.3	612.7	594.5	- 3.0	21.3
Others	21.9	23.8	23.7	23.1	- 2.5	0.8
Total CPEs	731.9	746.1	750.9	742.3	- 1.1	26.6
TOTAL WORLD	2903.7	2766.5	2839.0	2789.5	- 1.8	100.0
of which OPEC	1150.4	903.0	904.9	839.6	- 7.2	30.1

* Includes crude oil, oil sands and NGLs(natural gas liquids-the liquid content of natural gas where this is recovered sparately). Excludes liquid fuels from other sources such as coal derivatives.

$ Less than 0.05.

Note: Figures for Indian Inserted.

SOURCE:BP Statistical Review of World Energy 1986.

CURDE OIL PRODUCTION BY OPEC MEMBER COUNTRIES

(Million Tonnes)

OPEC Countries	1973	1975	1979	1980	1981	1982	1983	1984	1985(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Algeria	51	48	59	52	46	46	43	46	45
Ecuador	10	8	11	10	10	10	12	13	14
Gabon	8	11	10	9	8	8	8	8	8
Indonesia	66	65	79	78	82	69	65	69	63
Iran	293	268	158	74	66	120	122	109	110
Iraq	99	111	171	130	44	50	54	60	70
Kuwait	140	94	113	72	48	35	45	49	45
Libya	105	71	101	88	59	55	53	53	52
Nigeria	100	89	114	102	71	64	61	69	73
Qatar	27	21	25	23	20	16	15	20	15
Saudi Arabia	368	344	470	493	491	328	256	233	175
U.A.E.	102	107	117	111	92	76	72	78	80
Venezuela	179	125	125	116	113	101	101	98	90
Total	1548	1362	1553	1358	1150	978	903	905	840

P = Provisional.

WORLD PRODUCTION OF NATURAL GAS 1981-1985

(Million Tonnes Oil equivalent)

Country	1981	1983	1984	1985	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
North America						
USA	489.3	409.0	443.7	422.3	- 4.8	27.5
Canada	67.4	62.6	61.9	66.9	+ 8.0	4.4
Total N. America	556.7	471.6	505.6	488.9	- 3.3	31.9
Latin America						
Argentina	7.5	9.3	9.1	9.3	+ 2.2	0.6
Mexico	31.3	31.4	29.3	28.0	- 4.4	1.8
Venezuela	15.0	14.1	15.6	15.6	- 0.1	1.0
Others	11.5	13.9	15.0	15.0	-	1.0
Total Latin America	65.3	68.7	69.0	67.9	- 1.6	4.4
Western Europe						
France	6.6	5.5	5.3	4.5	-14.8	0.3
Italy	11.6	11.1	11.7	11.7	$	0.8
Netherlands	67.6	61.1	61.5	65.7	+ 6.8	4.3
Norway	23.5	22.9	24.8	24.0	- 3.0	1.6
United Kingdom	31.9	30.6	33.3	35.4	+ 6.5	2.3
West Germany	14.4	13.1	13.7	12.7	- 7.3	0.8
Others	1.3	1.2	1.7	2.4	+44.8	0.2
Total W.Europe	156.9	145.5	152.0	156.4	+ 3.0	10.3
Middle East						
Abu Dhabi	5.4	5.6	5.8	5.9	+ 1.8	0.4
Iran	6.5	9.9	12.2	12.2	+ 0.7	0.8
Kuwait	4.8	4.3	4.4	4.5	+ 2.6	0.3
Saudi Arabia	22.9	8.4	11.7	12.2	+ 5.0	0.8
Others	8.4	8.3	10.4	10.9	+ 4.7	0.7
Total Middle East	48.0	36.5	44.5	45.7	+ 3.1	3.0
Africa						
Algeria	22.1	32.1	30.4	31.7	+ 4.4	2.1
Libya	3.6	3.0	3.4	4.0	+18.6	0.3
Nigeria	1.6	1.3	1.5	1.3	-12.3	0.1
Others	1.8	3.2	4.2	5.1	+21.5	0.3
Total Africa	29.1	39.6	39.5	42.1	+ 6.8	2.8
Asia & Australasia						
Japan	1.9	1.9	1.9	2.0	+ 2.6	0.1
Indonesia	17.3	19.9	29.8	29.4	- 1.1	1.9
Other S.E.Asia	10.9	11.4	12.4	12.2	- 1.4	0.8
Pakistan	6.1	8.6	9.1	9.9	+ 9.2	0.6
Other South Asia	6.6	10.3	13.9	14.3	+ 3.0	0.9
Of which India	3.5	5.8	6.8	7.1	+ 4.4	0.5
Total Asia & Austra.	54.7	65.7	81.0	83.2	+ 2.8	5.3
Total NCW	910.7	827.6	891.6	884.5	- 0.7	57.7
Centrally Planned Economies(CPEs)						
China	11.6	10.8	10.9	11.5	+ 5.5	0.7
USSR	411.8	482.4	528.4	578.6	+ 9.5	37.7
Others	53.6	55.7	59.0	60.7	+ 2.9	3.9
Total CPEs	477.0	548.9	598.3	650.8	+ 8.8	42.3
TOTAL WORLD	1387.7	1376.5	1489.9	1535.3	+ 3.1	100.0

* = Excluding gas flared or recycled. $ = Less than 0.05.

SOURCE: BP Statisstical Review of World Energy.1986

Note : Figures for India Inserted.

WORLD CONSUMPTION OF NATURAL GAS 1981-1985

(Million Tonnes Oil equivalent)

Country	1981	1983	1984	1985	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
North America						
USA	495.1	435.5	466.4	444.5	- 4.7	29.8
Canada	47.8	47.3	47.8	50.4	+ 5.4	3.4
Total N. America	542.9	482.8	514.2	494.9	- 3.8	33.2
Western Europe						
Austria	3.9	3.8	4.2	4.6	+ 7.9	0.3
Belgium & Luxembourg	9.5	8.2	8.5	8.4	- 0.5	0.6
Denmark	-	-	0.1	0.6	*	+
Finland	0.6	0.6	0.7	0.8	+27.1	0.1
France	24.5	22.2	23.5	23.3	- 0.8	1.6
Greece	-	-	0.1	0.1	- 6.5	$
Iceland	-	-	-	-	-	-
Republic of Ireland	0.9	1.6	1.7	1.7	+ 4.5	0.1
Italy	22.8	22.6	26.5	27.3	+ 3.2	1.8
Netherlands	30.0	29.5	31.2	33.0	+ 5.9	2.2
Norway	-	-	-	-	-	-
Portugal	-	-	-	-	-	-
Spain	2.1	2.5	2.0	2.3	+12.9	0.1
Sweden	-	-	-	0.1	*	$
Switzerland	0.8	0.9	1.0	1.0	- 5.2	0.1
Turkey	-	-	-	-	-	-
United Kingdom	42.4	44.0	45.0	47.9	+ 6.4	3.2
West Germany	41.4	39.1	41.1	41.4	+ 0.6	2.8
Cyprus/Gibraltar/Malta	-	-	-	-	-	-
Total W.Europe	178.9	175.0	185.6	192.5	+ 3.7	12.9
Cyprus/Gibraltar/Malta	-	-	-	-	-	-
Australasia						
Australis	10.6	11.2	11.7	12.5	+ 7.0	0.8
New Zealand	1.0	2.1	2.6	3.2	+22.7	0.2
Total Australsia	11.6	13.3	14.3	15.7	+ 9.9	1.0
Japan	24.2	25.2	33.6	36.0	+ 7.1	2.4
Total OECD	757.6	696.3	747.7	739.1	- 1.1	49.5
Rest of NCW						
Latin America	55.8	63.1	64.4	69.9	+ 8.4	4.7
Middle East	35.3	33.8	40.9	40.2	- 1.7	2.7
Africa	21.3	25.2	24.3	25.9	+ 6.6	1.7
South Asia	8.9	12.7	15.3	17.5	+13.1	1.2
South East Asia	8.1	12.6	14.9	17.6	+18.4	1.2
Total Rest of NCW	129.4	147.4	159.8	171.1	+ 7.1	11.5
Total NCW	887.0	843.7	907.5	910.2	+ 0.3	61.0
Centrally Planned Economies(CPEs)						
China	10.4	10.7	10.8	11.5	+ 6.5	0.8
USSR	353.7	405.0	435.0	477.2	+ 9.7	32.0
Others	80.8	86.1	90.8	92.9	+ 2.3	6.2
Total CPEs	444.9	501.8	536.6	581.6	+ 8.4	39.0
TOTAL WORLD	1331.9	1345.5	1444.1	1491.8	+ 3.3	100.0

$ Less than 0.05. * Greater than 300%.

Source: BP STatistical Review of World Energy. 1986.

Note : Figure for India Inserted.

PRODUCTIVITY OF PRODUCING WELLS IN SELECTED FIELDS IN THE WORLD-1985

COUNTRY/FIELD	Discovery date	Depth (Metres)	WELLS Flowing	WELLS Pumping	Daily AV-first Six months 1985('000'bbls)	APIdegree Gravity	t/w/d
1.	2.	3.	4.	5.	6.	7.	8.
ALGERIA:							
All fields since	1956	458-3834	N.A.	N.A.	647	43.5@	N.A.
LIBYA:							
BU Attifel	1968	4362	31	-	153	41.0	654
Intiser D	1967	2867	13	6	54	39.0	374
Nasser	959	1678-2318	N.A.	N.A.	N.A.	38.0	N.A.
Oasis Group Since	1959	671-3050	-	491	296	36.5	81
IRAN:							
On-shore since	1923	488-2721		- 361	- 2198		
Off-shore since	1960	854-3355		- N.A.	- 2164	32.0@	N.A.
IRAQ:							
All fields since	1909	854-3813	N.A.	N.A.	1298	33.5@	N.A.
KUWAIT:							
All fields since	1938	1464-3050	572	-	857	32.0@	206
SAUDI ARABIA:							
All fields since	1938	1464-2849	N.A.	N.A.	3227	31.5	N.A.
BURMA:							
All fields since	1902	30-2135	170	275	30	37.0	0.9
INDIA:							
On-shore fields since	1902	92-3902					
Off-shore fields since	1974	1382-1412	N.A.	N.A.	614	29.0	N.A.
INDONESIA:							
On-shore fields since	1893	61-4423	694	3551	750	35.0@	22
Off-shore fields since	1970	702-3401	369	434	484	31.5@	83

t/w/d = Tonne/Well/Day.
@ = Average
N.A. = Not available.
SOURCE = Oil & Gas journal, December 30,1985.

WORLD OIL REFINING CAPACITIES AT/END 1981 TO 1985

(Million Tonnes Per Annum)

COUNTRY/AREA.	1981	1982	1983	1984	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
North America	1022	956	894	862	- 2.4	23.5
USA	914	843	793	759	- 3.0	20.7
Canada	108	113	101	101	+ 2.6	2.8
Latin America	445	437	415	357	-10.0	9.8
Argentina	35	35	35	33	- 2.2	0.9
Brazil	76	76	70	65	-	1.8
Mexico	76	81	81	84	-	2.3
Netherlands Antilles	39	39	39	16	-56.8	0.4
Trinidad	23	19	19	13	-18.8	0.4
Venezuela	70	68	61	62	+ 0.4	1.7
Others	126	119	110	84	-15.1	2.3
Western Europe	983	885	832	727	- 4.9	19.9
Belgium	48	36	36	36	-	1.0
France	161	137	119	109	- 0.7	3.0
Italy	199	175	168	129	- 5.9	3.5
Netherlands	89	79	81	72	-	2.0
Spain	78	78	72	72	-	2.0
United Kingdom	118	107	105	88	- 8.7	2.4
West Germany	148	126	114	88	-17.1	2.4
Others	142	147	131	133	- 1.4	3.6
Middle East	162	178	178	186	+ 5.5	4.9
Bahrain	13	13	13	13	-	0.3
Iran	31	31	30	26	-	0.7
Iraq	13	13	10	15	-	0.4
Kuwait	26	27	30	28	- 6.5	0.7
Saudi Arabia	33	43	43	56	+28.9	1.5
Others	46	51	52	48	- 1.8	1.3
Africa	102	118	117	127	+ 0.3	3.5
Asia & Australaisia:	543	539	527	539	- 0.4	14.9
Japan	284	275	249	249	-	6.8
Indonesia	26	26	38	46	-	1.3
Singapore	51	51	51	51	-	1.4
Other South East Asia	97	97	97	100	- 5.7	2.7
South Asia	44	50	51	58	+15.7	1.6
Of which India*	31.8	36.7	37.8	37.8	45.6	-
Australasia	41	41	41	35	-10.4	1.0
Total NCW	3257	3113	2963	2798	- 3.1	76.4
Total Centrally Planned Economies(CPEs)	827	846	861	866		23.6
TOTAL WORLD	4084	3959	3824	3664	- 2.4	100.0

Conversion Factor:1 Million Tonnes of oil per annum=20,000 barrel per day approx.
* = As on Ist April each year.
SOURCE: BP Statistical Review of World Energy: 1986.

WORLD REFINERY CRUDE THROUGHPUT : 1976 TO 1985.

(Million Tonnes Per Annum)

COUNTRY/AREA.	1976	1977	1978	1979	1980	1981
	1.	2.	3.	4.	5.	6.
U.S.A	672	731	739	723	676	624
Canada	85	90	91	98	104	97
Latin America	284	286	299	311	323	329
Western Europe	681	678	675	708	646	595
Middle East	115	112	127	118	122	110
Africa	53	58	64	68	73	76
Japan	211	214	212	217	201	181
South East Asia	93	102	117	122	119	124
South Asia	28	30	32	34	35	40
Of Which India	22.8	24.4	25.6	28.2	25.1	29.5
Australasia	33	34	34	35	32	33
Total NCW	2255	2335	2390	2434	2331	2209
Centrally Planned Economies (CPEs)	579	579	644	662	666	671
TOTAL WORLD:	2834	2932	3034	3096	2997	2880

(Million Tonnes Per Annum)

COUNTRY/AREA.	1982	1983	1984	1985	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
U.S.A	589	584	602	601	- 0.2	21.3
Canada	82	77	79	72	- 7.6	2.6
Latin America	304	291	291	290	- 0.5	10.3
Western Europe	574	564	575	562	- 2.3	19.9
Middle East	112	126	133	140	+ 4.9	4.9
Africa	87	96	99	101	+ 2.0	3.6
Japan	168	163	168	156	- 7.0	5.5
South East Asia	117	119	114	113	- 0.2	4.0
South Asia	42	44	44	51	+ 14.1	1.8
Of Which India	32.1	34.5	35.2	41.2	+17.0	1.5
Australasia	31	30	31	29	- 4.9	1.0
Total NCW	2106	2094	2136	2115	- 1.0	74.9
Centrally Planned Economies (CPEs)	679	684	694	708	+ 2.0	25.1
TOTAL WORLD:	2785	2778	2830	2823	- 0.2	100.0

NCW = Non Communist World. Coversion Factor used:1 million of oil per annum 20,000 barrel per day approx.

SOURCE: BP Statistical Review of the World Energy, 1986.

Country-wise World Oil Consumption 1981-85

(Million Tonnes)

Country	1981	1983	1984	1985	Percentage change 1985 over 1984	Percentage share of total 1985
1.	2.	3.	4.	5.	6.	7.
North America						
USA	746.0	704.9	726.8	724.1	- 0.4	25.8
Canada	81.7	68.2	66.7	67.7	+ 1.5	2.4
Total N. America	827.7	773.1	793.5	791.8	- 0.2	28.2
Latin America	212.6	211.0	210.0	209.5	- 0.2	7.5
Western Europe						
Austria	11.0	10.1	9.8	9.8	+ 0.2	0.4
Belgium & Luxembourg	24.5	21.1	20.4	20.2	- 1.0	0.7
Denmark	12.8	10.4	10.4	10.8	+ 3.8	0.4
Finland	12.3	10.5	10.6	10.8	+ 1.0	0.4
France	99.0	89.4	85.9	83.9	- 2.3	3.0
Greece	11.9	11.4	11.7	12.0	+ 2.5	0.4
Iceland	0.5	0.5	0.5	0.5	+10.0	$
Republic of Ireland	5.1	4.2	4.1	3.8	- 7.2	0.1
Italy	95.7	89.2	84.9	85.0	+ 0.2	3.0
Netherlands	35.7	29.1	28.7	29.1	+ 1.6	1.0
Norway	8.7	8.3	8.6	8.8	+ 2.0	0.3
Portugal	8.8	9.5	9.5	8.2	-14.0	0.3
Spain	50.4	47.8	44.8	44.0	- 1.8	1.6
Sweden	21.8	18.2	16.8	16.9	+ 0.6	0.6
Switzerland	11.9	12.3	11.8	12.3	+ 3.7	0.4
Turkey	15.4	16.2	17.0	18.9	+11.6	0.7
United Kingdom	74.7	72.5	89.6	77.8	-13.2	2.8
West Germany	117.6	110.8	110.6	114.0	+ 3.2	4.1
Cyprus/Gibraltar/Malta	1.5	1.6	1.7	1.8	+ 8.1	0.1
Total W.Europe	1704.1	1584.5	1618.4	1592.5	- 1.5	20.2
Middle East	89.5	96.0	99.0	98.8	- 0.2	3.5
Africa	74.4	78.3	80.5	82.8	+ 2.8	2.9
Japan	223.9	207.2	215.1	201.3	- 6.4	7.2
South East Asia	118.6	114.7	114.7	112.8	- 1.7	4.0
Australasia	33.2	31.1	32.4	30.8	- 5.0	1.7
South Asia	43.4	46.4	50.4	53.4	+ 6.0	1.9
of which India	28.5	32.1	34.4	36.9	+ 7.3	1.3
Total NCW	2242.6	2130.9	2173.0	2149.8	- 1.1	76.6
Centrally Planned Economies(CPEs)						
China	84.8	84.7	87.5	87.6	+ 0.1	3.1
USSR	444.1	446.6	440.7	447.7	+ 1.6	15.9
Others	128.0	121.5	121.8	124.3	+ 2.1	4.4
Total CPEs	656.9	652.8	650.0	659.6	+ 1.5	23.4
TOTAL WORLD	2899.5	2783.7	2823.0	2809.4	- 0.5	100.0

* Inland demand plus international aviation and marine bunkers and refinery fuel and loss. $ Less than 0.05.

Source: BP STatistical Review of World Energy. June 1986.

Note : Figure for India Inserted.

Product-wise Consumption of Main Petroleum Products in the Non-Communist World (NCW) During 1981-85

(Million Tonnes)

Country	1981	1983	1984	1985	Percentage Change 1985 Over 1984	Percentage Share of Total 1985
1.	2.	3.	4.	5.	6.	7.
USA						
Gasoline	297.9	298.4	304.4	304.7	+ 0.1	42.1
Middle distillates	199.2	189.0	200.9	203.8	+ 1.4	28.1
Fuel oil	110.6	78.6	76.0	66.1	-13.1	9.1
Other	138.3	138.9	145.5	149.5	+ 2.8	20.7
Total USA	746.0	704.9	726.8	724.1	- 0.4	100.0
Canada						
Gasoline	31.3	27.3	27.2	27.4	+ 0.6	40.5
Middle distillates	25.0	21.6	22.0	22.0	- 0.1	32.4
Fuel oil	11.2	7.7	6.8	5.6	-18.2	8.2
Other	14.2	11.6	10.7	12.7	+19.8	18.9
Total Canada	81.7	68.2	66.7	67.7	+ 1.5	100.0
Western Europe						
Gasoline	131.1	135.2	135.5	135.3	- 0.1	23.9
Middle distillates	220.7	213.1	221.3	224.9	+ 1.6	39.7
Fuel oil	179.3	135.2	128.5	119.7	- 6.8	21.1
Others	86.7	88.0	90.4	86.7	- 3.8	15.3
Total Western Europe	617.8	571.5	575.7	566.8	- 1.5	100.0
Japan						
Gasoline	39.8	39.5	40.6	40.8	+ 0.6	20.3
Middle distillates	60.6	59.6	64.2	63.6	- 1.0	31.6
Fuel oil	91.2	76.4	75.4	63.4	-16.0	31.5
Others	32.3	31.7	34.9	33.5	- 4.1	16.6
Total Japan	223.9	207.2	215.1	201.3	- 6.4	100.0
Australasia						
Gasoline	13.1	13.1	13.5	13.5	+ 0.3	43.9
Middle distillates	9.8	9.6	10.2	10.4	+ 2.1	33.9
Fuel oil	5.6	3.8	3.8	2.9	-23.3	9.5
Others	4.7	4.6	4.9	4.0	-20.3	12.7
Total Australasia	33.2	31.1	32.4	30.8	- 5.0	100.0
Rest of NCW						
Gasoline	96.1	98.9	101.0	101.3	+ 0.3	18.1
Middle distillates	178.8	192.0	196.6	198.4	+ 0.9	35.5
Fuel oil	190.3	179.4	176.7	173.6	- 1.7	31.1
Others	74.8	77.7	82.0	85.8	+ 4.6	15.3
Totar Rest of NCW	540.0	548.0	556.3	559.1	+ 0.1	100.0
Total NCW						
Gasolines	609.3	612.4	622.2	623.0	+ 0.1	29.0
Middle distillates	694.1	684.9	715.2	723.1	+ 1.1	33.6
Fuel oil	588.2	481.1	467.2	431.3	- 7.7	20.1
Others	351.0	352.5	368.4	372.4	+ 1.1	17.3
Total NCW	2242.6	2130.9	2173.0	2149.8	- 1.1	100.0

Note: 'Gasolines' consists of aviation and motor gasolines and LDF(light distillate feedstock.)
'Middle distillates' consists of jet and burning kerosene and gas and diesel oils (including marine bunkers).
'Fuel Oil' includes marine bunkers.
'Others consists of refinery gas, LPGs, solvents, petroleum coke, lubricants, bitumen, wax, refinery fuel and loss.

Source: BP Statistical Review of World Energy, June 1986.

WORLD OIL PRODUCTION, CONSUMPTION AND RELATIVE DEFICIT/SURPLUS. IN EACH REGION/COUNTERY DURING 1985 & 1973.

(Million Tonnes)

COUNTRY/REGION	1985				1973			
	Production	Consumption	Deficit Surplus	% extent of dependence	Production	Consumption	Deficit Surplus	% extent of dependence
1.	2.	3.	4.	5.	6.	7.	8.	9.
North America (Including Canada)	578.4	791.8	-213.4	-27.0	621.3	901.7	-280.4	-31.1
Latin America	334.0	209.5	+124.5	+59.4	272.0	160.3	+111.7	+69.7
West Europe	191.2	568.6*	-377.4	-66.4	22.5	737.6*	-715.1	-97.0
Middle East	532.5	98.8	+433.7	+439.0	1052.5	62.2	+990.3	+1592.1
Africa	252.6	82.8	+169.8	+205.1	290.0	49.5	+240.5	+485.9
South & South East Asia(excluding India)	102.2	126.0	-23.8	-18.9	84.3	81.8	+2.5	+3.1
India	25.6	40.2	-14.6	-36.3	7.2	23.7	-16.5	-69.6
Japan	0.5	201.3	-200.8	-99.8	0.7	269.1	-268.4	-99.7
Australasia	30.3	30.8	- 0.6	- 1.9	18.5	32.9	-14.4	+43.8
U.S.S.R.	594.5	447.7	+146.8	+32.8	429.0	325.7	+103.3	+31.7
Eastern Europe	23.1	124.3	-101.2	-81.4	18.8	99.7	-80.9	-81.1
China	124.7	87.6	+37.1	+42.4	54.8	53.8	+1.0	+1.9
T O T A L :	2789.5	2809.4	-19.9	-0.7	2871.6	2798.0	+73.6	+2.6

* = Inclusive of 1.4,1.8 million tonnes consumption of Cyprus/Gibralter/Malta in 1973 and 1985 respectively.

SOURCE: B.P. Statistical Review of World Energy - June, 1986.

WORLD CRUDE OIL & PETROLEUM PRODUCTS IMPORTS/EXPORTS - 1985

(Million Tonnes)

Country/Area	IMPORTS		EXPORTS	
	Crude	Products	Crude	Products
1.	2.	3.	4.	5.
U.S.A	159.9	88.4	10.1	31.7
Canada	13.4	4.6	23.3	14.9
Latin America	71.8	19.2	126.1	56.7
Western Europe	311.6	100.9	19.4	21.3
Middle East	4.1	6.4	391.8	54.8
North Africa	0.9	5.2	97.9	17.9
West Africa	-	1.1	86.4	1.9
East & Southern Africa	20.4	2.9	-	0.9
South Asia	18.0	6.5	0.9	1.2
South East Asia	79.9	20.7	46.6	73.8
Japan	169.4	32.8	-	0.8
Australasia	2.4	5.6	4.3	2.7
U.S.S.R.	27.2	1.7	76.9	23.7
East Europe & China				
Destination not known*	7.7	6.3	-	-
Total World	886.7	302.3	886.7	302.3

* Includes changes in the quantity of oil in transit losses, minor movements not otherwise shown, unidentified military use, etc.

(i) Bunkers are not included as exports.

(ii) Regional descriptions are geographical.

(iii) Intra-area movements (for example between individual countries in Western Europe) are excluded.

SOURCE: BP Statistical Review of World Energy-June, 1986.

EXPORTS OF CRUDE OIL REFINED PRODUCTS FROM OPEC MEMBER COUNTRIES.

(Million Tonnes)

	1973	1975	1980	1982	1983	1984	1985(P)
1.	2.	3.	4.	5.	6.	7.	8.
(a) CRUDE OIL:							
Algeria	49.7	43.9	35.8	11.4	13.0	9.1	8.8
Ecuador	9.8	7.3	5.5	4.5	6.3	7.4	8.4
Gabon	6.0	10.3	7.6	6.5r	6.8r	7.0	8.2
Indonesia	50.6	49.7	49.4	40.9	42.9	43.8	35.3
Iran, IR	263.8	233.5	39.8	81.2	85.9	76.1r	78.4
Iraq	96.3	102.9	122.9	40.6	36.3	42.8	54.3
Kuwait	132.1	90.2	64.8	18.4	27.2	42.9r	23.8
Libya	108.7	71.6	84.6	48.7	46.9	46.5r	44.7
Nigeria	98.9	85.7	98.0	50.1r	46.9	54.7	61.6
Qatar	28.5	21.4	23.3	16.2	13.4	17.8	14.2
Saudi Arabia	350.7	330.0	461.2	282.0	198.9	159.3r	112.6
U.A.E.	76.1	83.1	84.9	58.4	53.9	51.8	48.9
Venezuela	106.2	73.6	64.4	52.9	48.8r	50.0r	41.0
TOTAL	1377.4	1203.2	1142.2	711.8	627.2	599.2	540.2
(b) Refined Petroleum Products							
Algeria	1.8	3.1	7.4	20.2	14.6	21.7	19.3
Ecuador	0.1	Neg.	1.2	0.8	0.6	0.9r	0.7
Gabon	0.7	0.3	0.5	0.7	0.6	0.3r	0.2
Indonesia	7.7	5.0	8.1	6.1	6.5	9.6	7.5
Iran, IR	7.4	10.8	7.8	4.7	4.9	2.8r	2.0
Iraq	0.4	1.9	1.8	2.5	3.1	3.1	3.5
Kuwait	10.3	7.0	17.2	18.5	20.7	19.8r	25.6
Libya	1.7	2.4	3.6	3.9	3.9	3.8	4.5
Nigeria	0.7	0.3	3.7	0.5	0.8	1.0	1.4
Qatar	-	-	-	0.6	0.8	1.1	1.1
Saudi Arabia	16.6	16.5	20.3	26.9	24.8	24.8	25.7
U.A.E.	-	-	1.0	2.3	3.0	3.0	3.6
Venezuela	51.3	30.7	28.3	23.9	25.7	25.9	27.2
TOTAL	98.7	78.0	100.9	111.6	110.0	117.8	122.3

P = Provisional/estimated.
r = Revised

SOURCE: OPEC Annual Statistical Bulletin 1985.
Conversion factor used : 20,000 barrels/day = 1 millon tonnes/year approx.

CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS 1960-1985

(MILLION TONNES)

Import Region	1960	1965	1970	1975	1978	1979	1980	1981	1982r	1983r	1984r	1985(P)
North America	61.0	65.9	68.5	171.0	279.8	278.7	212.6	153.2	81.5	68.4	68.7	64.5
Of which USA	43.9	49.6	46.7	136.3	255.6	255.1	189.8	136.7	72.1	63.0	64.0	44.3
Latin America	55.9	71.5	96.9	145.2	128.7	137.0	115.3	90.6	70.8	65.4	59.2	42.5
Western Europe	157.5	315.1	564.5	519.2	517.8	521.2	454.6	354.5	276.7	245.8	234.2	225.4
Of which:												
France	31.8	63.2	107.3	104.6	109.0	114.5	100.2	71.9	57.3	44.7	43.2	36.7
Germany	21.2	45.5	69.0	62.6	64.6	74.7	66.1	47.5	40.5	32.8	25.2	18.6
Italy	24.8	59.9	109.5	87.0	92.9	94.7	67.8	64.7	61.2	53.3	51.4	46.0
U.K.	43.1	74.7	107.4	80.0	56.0	43.9	34.6	24.3	18.6	12.6	9.8	10.0
Middle East	17.0	16.7	20.3	15.6	18.9	21.2	21.9	21.7	23.4	18.6	16.5	17.0
Africa	1.5	13.0	23.8	31.4	22.7	18.7	16.2	14.7	10.6	8.5	9.0	7.6
Asia and Far East	34.4	88.6	215.5	280.0	306.5	309.5	287.5	267.4	228.2	206.4	196.0	171.5
Of which:												
Japan	24.4	66.3	162.6	199.8	196.7	195.5	177.9	155.5	140.7	135.0	135.5	118.8
Oceania	10.1	15.4	15.2	8.9	10.3	10.6	10.7	10.5	9.1	5.4	4.8	2.3
CPEs	-	-	2.4	15.2	19.7	23.9	17.1	8.5	8.6	6.2	8.2	9.0
Unspecified	-	2.2	4.1	16.7	Neg.	18.9	6.3	0.1	2.9	2.5	2.6	0.4
ECD AREA	-	462.7	810.8	898.9	1004.6	1006.0	855.8	673.7	504.9	451.1	434.7	401.9
TOTAL WORLD:	337.4	588.4	1011.2	1203.2	1304.4	1339.7	1142.2	921.2	711.8	627.2	599.2	540.2

P = Provisional/estimated.
r = Revised

SOURCE: OPEC Annual Statistical Bulletin- 1985 and OPEC Data Services Deptt.,October 1986.

Note : Figures converted to million tonnes using the Conversion factor : 20,000 barrels/day = 1 millon tonnes/year approx.

COUNTRY-WISE OPEC CRUDE OIL EXPORT BY REGIONS : 1984.

(Qty.'000' Barrel/day)

Country/Region	Developed Countries (OECD)					Developing Countries							
	North America	Western Europe	Ocea-nia	Japan	Total OECD or Developed World	Latin Amer-rica	Asia & Far East (Excl. Japan)	Middle East	Africa	Total Develop-ing Countires	CPES	Un-Sp-ecified	Grand Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Algeria	30.2	130.8	-	-	161.0	10.4	-	0.8	-	11.2	9.4	-	181.6
2. Ecuador	65.0	-	-	-	65.0	46.7	35.4	-	-	82.1	-	-	147.1
3. Gabon	50.4	59.1	-	-	109.5	14.6	10.1	-	5.0	29.7	-	-	139.2
4. Indonesia	208.8	12.0	14.4	422.4	657.6	118.7	100.0	-	-	218.7	-	-	876.3
5. Iran, IR	66.7	825.1	-	257.8	1149.6	14.0	64.2	160.0	15.0	253.2	85.0	-	1487.8
6. Iraq	10.0	594.0	-	14.0	618.0	196.0	-	2.0	24.0	222.0	16.0	-	856.0
7. Kuwait	24.3	120.5	9.4	181.5	335.7	20.0	250.5	-	-	270.5	-	-	606.2
8. S.P. Libyan, A	5.4	829.8	-	-	835.2	15.0	-	20.0	7.0	42.0	35.0	-	912.2
9. Nigeria	173.2	790.8	-	-	964.0	88.8	-	-	41.3	130.1	-	-	1094.1
10. Qatar	4.1	105.8	3.4	220.0	333.3	12.0	10.0	-	1.5	23.5	-	-	356.8
11. Saudi Arabia	311.2	750.0	53.9	1062.6	2177.7	180.0	637.4	90.0	70.0	977.4	-	-	3155.1
12. U.A.E.	97.2	273.5	11.5	542.5	922.7	35.0	54.5	6.5	18.0	144.0	-	-	1036.7
13. Venezuela	331.8	200.6	-	-	532.4	434.5	-	-	-	434.5	-	24.0	990.9
TOTAL :	1378.3	4692.0	92.6	2698.8	8861.7	1185.7	1162.1	279.3	181.8	2808.9	145.4	24.0	11840.0
					74.8%					23.7%	1.2%	0.3%	100.0

SOURCE : OPEC Data Services Deptt.

OIL REVENUES OF OPEC MEMBER COUNTRIES : 1974-84.

(Billon US $)

OPEC MEMBER COUNTRIES	1974	1978	1979	1980	1981	1982(r)	1983	1984(P)
1.	2.	4.	5.	6.	7.	8.	9.	10.
Algeria	3.30	4.59	7.52	12.50	10.70	8.50	9.70	9.70
Ecuador	0.41	0.40r	0.80	1.39	1.56	1.18	1.10	1.60
Gabon	0.17	0.50r	0.90	1.80	1.60	1.50	1.50	1.40
Indonesia	1.37	5.20	8.10	12.86	14.39	12.70	9.66	10.40
Iran,	17.82	19.30	20.50	13.50	9.30	17.60r	20.00	16.70
Iraq	5.70	10.20	21.29	26.10	10.40	9.50	8.40	10.40
Kuwait	6.54	7.95	16.86	17.90	14.90	9.48	9.90	10.80
Libya	6.00	8.40	15.22	22.60	15.60	14.00	11.20	10.40
Nigeria	6.66	7.90	15.90	23.41	16.72r	13.09	10.10	12.40
Qatar	1.45	2.20	3.08	4.80	4.72	3.15	3.00	4.40
Saudi Arabia	22.57	32.23	57.52	102.21	113.20	76.00	46.10	43.70
U.A.E.	5.54	8.20	10.86	19.50	18.70	16.00	12.80	13.00
Venezuela	9.27	7.32	11.96	16.34	17.40	13.54	13.50	13.70
TOTAL	86.80	114.39	192.51	274.91	249.19	196.24	156.96	158.60

VALUE OF PETROLEUM EXPORTS FROM OPEC MEMBER COUNTRIES:1974-1985

(Billion U/S $)

OPEC MEMBER COUNTRIES	1974	1978	1979	1980	1982	1983	1984	1985
1.	2.	3.	4.	5.	6.	7.	8.	9.
Algeria	4.27	5.86	8.75	12.65	10.77r	9.46	9.19	8.18
Ecuador	0.69	0.52	1.03	1.39	1.18	1.50r	1.62	1.73
Gabon	0.65	0.86r	1.14r	1.74r	1.60r	1.42r	1.42	1.35
Indonesia	5.21	7.44	8.87	12.85r	14.86r	13.48	12.10	8.56
Iran,	20.90	21.68	19.19	13.29	19.23r	19.92r	12.95	12.88
Iraq	6.51	10.85	21.29	26.14	10.10	9.65	11.24	12.46
Kuwait	10.39	9.42	16.77	17.68	8.83r	9.95r	10.39	9.69
Libya	7.13r	9.30r	14.91r	20.45r	13.94	11.39r	11.13	10.92
Nigeria	8.51r	8.93r	16.07r	24.93r	11.88r	9.94r	11.53	12.18
Qatar	1.98	2.30	3.61r	5.41r	4.10r	3.06r	4.22	3.23
Saudi Arabia	35.48r	40.33	62.85r	108.17r	78.12r	44.85r	35.67	27.50
U.A.E.	6.31	8.66	12.86	19.39r	15.97r	13.02r	12.41	12.49
Venezuela	10.55	7.44	13.63	18.25	15.63	13.84	12.15	10.35
TOTAL	118.58	134.89	200.97	282.34	206.21	161.48	146.02	131.52

r = Revised. P = Provisional/estimated.

SOURCE: i) OPEC Annual Statistical Bulletin,1985.
ii) OPEC Data Services Deptt. for October,1986.

OFFCIAL DEVELOPMENT ASSITSTANCE FROM OECD AND OPEC MEMBERS: 1980-1984

COUNTRIES	AMOUNT (Million of Us.$)					As percentage of donor G.N.P.				
	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
OECD:										
Itlay	683	666	811	827	1105	.17	.19	.24	.24	.32
New Zealand	72	68	65	61	59	.33	.29	.28	.28	.28
United Kingdom	1854	2192	1800	1605	1432	.35	.43	.37	.35	.33
Japan	3353	3171	3023	3761	4319	.32	.28	.28	.33	.35
Austria	178	220	236	158	181	.23	.33	.35	.23	.28
Finland	111	135	144	153	178	.22	.28	.30	.33	.36
Australia	667	650	882	754	773	.48	.41	.57	.49	.45
Canada	1075	1189	1197	1429	1535	.43	.43	.41	.45	.47
Netherlands	1630	1510	1472	1195	1268	1.03	1.08	1.08	.91	1.02
Belgium	595	575	499	480	410	.50	.59	.59	.59	.59
France	4162	4177	4034	3815	3790	.64	.73	.75	.74	.77
United States	7138	5782	8202	7992	8698	.27	.20	.27	.24	.23
Denmark	481	403	415	395	449	.74	.73	.76	.73	.85
Germany(FR)	3567	3181	3152	3176	2767	.44	.47	.48	.49	.45
Norway	486	467	559	584	526	.85	.82	.99	1.06	.99
Sweden	962	919	987	754	737	.79	.83	1.02	.85	.80
Switzerland	253	237	252	320	286	.24	.24	.25	.32	.30
T O T A L :	27267	25542	27730	27458	28513					
OPEC										
Nigeria	33	141	58	35		.04	.18	.08	.05	
Iran	-83	-93	-121	139		--	--	--	.13	
Iraq	768	140	9	-3		2.09	.47	.03	--	
Algeria	103	97	128	44		.25	.23	.29	.09	
Venezuela	125	67	126	141		.21	.10	.18	.20	
Libya	382	293	43	85		1.18	1.11	.18	.35	
Saudi Arabia	5943	5664	4028	3916		5.09	3.54	2.61	3.53	
Kuwait	1140	1154	1168	995		3.52	3.60	4.49	4.46	
U.A.E.	909	811	402	100		3.30	2.72	1.46	.42	
Qatar	270	250	50	22		4.05	3.77	3.89	.42	
TOTAL OAPEC:	9515	8409	5828	5159		3.73	2.82	2.02	2.10	
TOTAL OPEC:	9590	8524	5891	5474		2.41	1.94	1.37	1.45	

P = Provisional/Estimated.
SOURCE: World Development Report-1985.

LOAN ASSISTANCE FROM OPEC AND OTHER OIL SUPPLYING NATIONS : 1975-76 TO 1985-86

(Rs. Crores)

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86 Apr-Sep.85)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
I. U.S.S.R.:											
Authorisation	--	--	208.3	--	--	485.7	--	--	144.6	--	1143.4
Utilisation	26.9	26.3	25.7	21.6	34.0	32.9	22.6	40.0	74.7	108.0	130.0
II. OPEC:											
1. Abu Dhabi Fund:											
Authorisation	--	--	--	--	--	--	--	--	--	--	--
Utilisation	--	--	5.8	--	6.5	2.0	--	--	--	--	--
2. OPEC Fund Loans											
Authorisation	--	19.7	12.1	--	16.3	39.8	--	29.3	23.4	--	--
Utilisation	--	--	18.4	11.5	--	3.4	9.2	37.4	6.5	6.2	16.9
3. U.A.E. Loans:											
Authorisation	17.5	--	--	--	--	--	--	--	--	--	--
Utilisation	44.1	17.9	--	--	--	--	--	--	--	--	--
4. Saudi Arab Fund: for Devep.											
Authorisation	--	--	86.4	--	--	--	29.2	--	30.7	--	57.8
Utilisation	--	--	--	3.2	41.1	13.0	6.0	12.4	2.4	3.0	23.6
5. Kuwait Fund: for Arab Economic Devlp.											
Authorisation	46.3	--	--	29.0	--	--	77.5	--	52.1	--	--
Utilisation	--	20.0	13.3	12.3	--	8.6	10.1	25.5	18.0	80.0	64.5
6. Iraq-Loans:											
Authorisation	33.0	32.1	--	--	--	82.9	--	--	--	--	--
Utilisation	31.3	33.4	3.9	3.8	1.4	0.7	--	--	--	--	--
7. Iran-Loans:											
Authorisation	923.7	73.8	--	--	--	--	--	--	--	--	--
Utilisation	326.5	174.3	166.7	70.1	12.6	17.3	--	--	--	--	--
III. TOTAL OPEC ASSISTANCE:											
Authorisation	1020.5	125.6	98.5	29.0	16.3	122.7	106.7	29.3	106.2	--	57.8
Utilisation	401.9	245.6	208.1	100.9	61.6	45.0	25.3	75.3	26.9	197.2	105.0
IV. International Fund for Agricultural Devlp.											
Authorisation	--	--	--	--	80.6	13.9	--	24.5	36.7	--	--
Utilisation	--	--	--	--	--	--	--	--	--	--	--
GRAND TOTAL:											
Authorisation	1020.5	125.6	306.8	29.0	96.9	622.3	106.7	53.8**	287.5**	--**	1201.2
Utilisation	428.8	271.9	233.8	122.5	95.6	77.9	47.9	115.3	101.6	224.8*	235.0

* = Estimated

** = April - September, 1984.

SOURCE = Economic Survey, 1984-85.

OFFICIAL SELLING PRICES OF KEY OPEC CRUDES/SINCE 1974

($/bbl)

CRUDE	Grav- ity	EFFECTIVE DATES 1974 Nov.1	1975 Jan.1	1975 Oct.1	1976 Feb.14	1976 June 1	1976 July 1	1976 Oct.1	1977 Jan.1	1977 July 1	1978 Jan.1	1978 Apr.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
ARABIAN/PERSIAN GULF CRUDES												
Saudi Arabia:												
Arab. Light	34	10.463		10.510					12.090	12.704		
Arab. Berri	39	11.114		11.874					12.480	13.225		
Arab.Medium	31	10.380		11.331		11.280			11.690	12.323		
Arab.Heavy	27	10.268		11.140		11.040			11.370	12.016		
Iran:												
Iran Light	34	10.67		11.62					12.81			
Iran.Heavy	31	10.45		11.49	11.40	11.33b)			12.49			
Kuwait:												
Kuwait	31	10.365		11.300		11.230			12.370		12.270	
Abu Dhabi:-												
Umm Shaif	37	10.868	10.645	11.695					12.280	13.040		
Murban	39	11.379	10.868	11.918					12.500	13.260		
Zakum	40	11.313	10.775	11.825					12.410	13.170		
Iraq												
Basrah	35	10.48		11.53			11.43		12.58			
Qatar:												
Merine	36	10.80		11.66					13.00			
Dukhan	40	11.17		11.85					13.19			
Oman:												
Oman Blend	34											
MEDITERRANEAN & AFRICAN CRUDES.												
Iraq:												
Kirkuk	36						11.65		12.77			
Libya:												
Brega	40			12.32			12.62		13.92	14.20	13.97	13.85
Nigeria:												
Bonny Light	37			12.70			13.10	13.25	14.31	14.61c)	14.31	14.10
Bonny Medium	26						12.55	12.52	13.71		13.66	13.55
INDONESIAN CRUDE												
Indonesia:												
Minas	34	12.60		12.80					13.55			
VENEZUELAN CRUDES												
Venezuela:												
Tia Zuana	26				11.12a)	11.22c)	11.32	11.65	12.72	12.82e)	12.70	
Tia Zuana	31				12.30a)			12.35	13.54			
Oficina	35				12.80a)				13.99			

a) = Effective Jan., 1. b) = Effective June, 9.
c) = Effective Apr., 1. e) = Effective Oct., 1.

OFFICIAL SELLING PRICES OF KEY OPEC CRUDES SINCE 1974 (Contd...)

($/bbl)

CRUDE	Gravity	EFFECTIVE DATES 1979 Jan.1	Feb.1	April1	May 17	June 1	Jul.1	Oct.20	Nov.1	Dec.17
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
ARABIAN/PERSIAN GULF CRUDES										
Saudi Arabia:										
Arab. Light	34	13.339		14.546		18.000			24.000	
Arab. Berri	39	14.060		16.470	17.870d)	21.324			24.721	
Arab.Medium	31	12.886		14.052		17.547			23.547	
Arab.Heavy	27	12.511		13.643		17.172			23.172	
Iran:										
Iran Light	34	13.45		16.57	17.17d)	18.47	22.00	23.50i)		28.50m)
Iran.Heavy	31	13.06		16.04	16.64d)	17.74	19.90	22.77i)		27.77m)
Kuwait										
Kuwait	31	12.830	14.030a)	15.800	16.40d)		19.490	21.43i)	25.500	
Abu Dhabi:-										
Umm Shaif	37	13.780	14.620	16.880	17.68		21.360		27.360	
Murban	39	14.100	15.120	17.100	17.90		21.560		27.560	
Zakum	40	14.010	15.030	17.010	17.81		21.460		27.460	
Iraq										
Basrah	35	13.21		15.60	16.20c)	16.94	19.96	21.96	23.96	25.96m)
Qatar:										
Marine	36	13.77	14.71	16.85	17.65		21.23		27.23	
Dukhan	40	14.03	15.05	17.04	17.84		21.42		27.42	
Oman:										
Oman Blend	34	13.94								
MEDITERRANEAN & AFRICAN CRUDES.										
Iraq:										
Kirkuk	36	13.41		15.82	16.42c)	17.16	21.25	22.18	24.18	26.18m)
Libya:										
Brege	40	14.69	15.37b) 16.07x)	18.25	18.95e)	21.26f)	23.45	26.22j)		29.95n)
Nigeria:										
Bonny Light	37	14.80		18.50	20.96e)		23.47		26.24k)	29.97
Bonny Medium	26	14.23		17.50	20.00e)		22.00		24.77k)	28.70
INDONESIAN CRUDE										
Indonesia:										
Minas	34	13.90		15.65	16.15e)	18.25g)	21.12		23.50(L)	25.50
VENEZUELAN CRUDES										
Venezuela:										
Tia Zuana	26	13.36		15.76	16.36e)		19.31	19.48i)		23.48p)
Tia Zuana	31	14.22		16.70	17.30e)		20.90			24.90p)
Oficina	35	14.69		17.21	17.81		22.45			26.75p)

a) = Effective Feb., 20 b) = Effective Feb.21. c) = Effective May, 1. d) Effective May,15.
e) = Effective May 16. f) = Effective May,27 g) = Effective June,15.h) Effective Jul.15
i) = Effective Oct.,1. j) = Effective Oct.,15.k) = Effective Nov.,6 1) Effective Nov,17
m) = Effective Dec.,1 n) = Effective Dec.,13 p) = Effective Dec.,14.x) Effective March,3.

OFFICIAL SELLING PRICES OF KEY OPEC CRUDES SINCE 1974 (Contd...)

($ /Barrel)

CRUDE	Gravity	EFFECTIVE DATES 1980 Jan.1	Feb.1	April 1	May 1	July 1	Aug.1	Sept.1	Nov.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
ARABIAN/PERSIAN GULF CRUDES.									
Saudi Arabia:									
Arab. Light	34	26.000		28.00			30.00		32.00
Arab. Berri	39	27.520		29.52			31.52		33.52
Arab.Medium	31	25.454		27.454			29.454		21.454
Arab.Heavy	27	25.000		27.00			29.00		31.00
Iran:									
Iran Light	34	30.00	31.00	35.37					
Iran.Heavy	31	29.27	30.27	34.37					
Kuwait:									
Kuwait	31	27.500			29.50	31.50			
Abu Dhabi:-									
Umm Shaif	37	29.360			31.36			33.36	
Murban	39	29.560			31.56			33.56	
Zakum	40	29.460			31.46			33.46	
Iraq:									
Basrah	35	27.96			29.96	31.96			
Qatar:									
Marine	36	29.23			31.23	33.23			
Dukhan	40	29.42			31.42	33.42			
Oman:									
Oman Blend	34					33.20c)	33.40		
MEDITERRANEAN & AFRICAN CRUDES.									
Iraq:									
Kirkuk	36	28.18			30.18	32.18			
Libya:									
Brega	40	34.67			36.67	37.00			
Nigeria:									
Bonny Light	37		34.18e)	34.69	36.69b)	37.00			
Bonny Medium	26		32.91e)	33.42	35.42b)	35.73			
INDONESIAN CRUDE									
Indonesia:									
Minas	34	27.50			31.50d)				
VENEZUELAN CRUDES									
Venezula:									
Tia Zuana	26	25.20	26.70a)		29.28d)	29.88			
Tia Zuana	31	26.90	28.90a)		32.40d)	33.00			
Oficina	35	28.75	30.75a)		34.25d)	34.85			

a) = Effective Feb., 6 b) = Effective May, 22. c) = Effective June, 30
d) = Effective May, 26. e) = Effecitve Feb., 4.

OFFICIAL SELLING PRICES OF KEY OPEC CRUDES SINCE 1974 (Contd...)

(EFFECTIVE DATES) ($/Barrel)

CRUDE	TYPE	1981				1982						
		Jan.1	Jul.1	Oct.1	Nov.1	Jan1	Feb.12	Feb23	Mar.20	Aor.1	Jul.1	Aug.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
ARABIAN/PERSIAN GULF CRUDES.												
Saudi Arabia:												
Arab. Light	34			34.00		34.00			34.00			
Arab. Berri	39			35.60		35.40			34.52			
Arab.Medium	31			33.00		32.40			32.40			
Arab.Heavy	27			31.50		31.00			31.00			
Iran:												
Iran Light	34	37.00			34.60	34.20	32.20	30.20			31.20	
Iran.Heavy	31	36.00			33.40	32.30	30.30	28.30			29.30	
Kuwait												
Kuwait	31	35.50			33.00	32.30						
Abu Dhabi:-												
Umm Shaif	37	36.36			35.50	35.30			34.36			
Murban	39	36.56			35.70	35.50			34.56			
Zakum	40	36.46			35.60	35.40			34.46			
Iraq:												
Basrah	35	35.96		33.96	34.71	33.46			34.21			
Qatar:												
Marine	36	37.23			35.50	35.30			34.30			
Dukhan	40	37.42			35.65	35.45			34.49			
Oman:												
Oman Blend	34	39.50	35.50	34.00		35.00		32.00c)	34.30			34.00
			36.00*	34.50*								
MEDITERRANEAN & AFRICAN CRUDES.												
Iraq:												
Kirkuk	36	36.18		34.18		34.18			34.18			
Libya:												
Brega	40	41.00	40.00		37.50	37.00				35.50		
Nigeria:												
Bonny Light	37	40.00		36.00a)	36.50b)	36.50			35.50			
Bonny Medium	26	38.70		34.70a)	35.20b)	33.75			33.50			
INDONESIAN CRUDE												
Indonesia:												
Minas	34	35.00										
VENEZ-UELAN CRUDES												
Venezuela:												
Tia Zuana	26	32.88			32.88							
Tia Zuana	31	36.00			35.00							
Oficina	35	38.06			37.06							

* = Lower price is for buy-back crude, higher is GSP for equity crude.

a) = Effective Aug.,26. b) = Effective Oct. 1. c) = Effective March,1.

OFFICIAL SELLING PRICES OF KEY OPEC CRUDES SINCE 1974 (Contd....)

($ /Barrel)

CRUDE	TYPE	EFFECTIVE DATES 1983 Feb.1	1983 March.1	1983 March 15	1983 Aug. 10	1984 Oct.18	1984 Dec.28	1985 Feb.1	1985 July	1986 March 31	1986 July 1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
ARABIAN/PERSIAN GULF CRUDES.											
Saudi Arabia:											
Arab. Light	34		29.00					28.00	28.00	28.00	
Arab. Berri	39		29.52					28.11	28.11	28.11	
Arab.Medium	31		27.40					27.40	27.20	27.20	
Arab.Heavy	27		26.00					26.50	26.00	26.00	
Iran:											
Iran Light	34			28.00			26.30	28.05		28.05	
Iran.Heavy	31			26.90	27.10		26.20	27.35		27.35	
Kuwait:											
Kuwait	31		27.30					27.10@		27.10	
Abu Dhabi:-											
Umm Shaif	37		29.36					28.05			28.05
Murban	39		29.56				28.76	28.15			28.15
Zakum	40		29.46				28.96	28.10			28.10
Iraq:											
Basrah	35			29.21				27.96		27.96	
Qatar:											
Marine	36		29.30					28.05		28.05	
Dukhan	40		29.49					28.10		28.10	
Oman:											
Oman Blend	34			29.00				28.00	28.00		28.00
MEDITERRANEAN & AFRICAN CRUDES.											
Iraq:											
Kirkuk	36			29.83				28.18		28.18	
Libya:											
Brega	40	30.40a)									
Nigeria:											
Bonny Light	37	30.00b)				28.00		28.65		28.65	
Bonny Medium	26	28.00b)				27.00		27.60		27.60	
INDONESIAN CRUDE											
Indonesia:											
Minas	34	29.53a)								28.53	
Venezuela:											
Tia Zuana	26			27.88				27.60c)		27.10	
Tia Zuana	31			29.84				28.25c)		28.05	
Oficina	35			31.09				28.80c)		28.80	

a) w.e.f. Feb. 23. b) Harbor fee of 2cts/bbl not included. c) w.e.f. Feb. 20. @ Effective 27th July 85.

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assesment since June. 1980

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assesment	DIFFERENCE (+) Premium (-) Discount
19.6.80	30.83	34.80	+ 3.97
3.7.80	31.30	34.34	+ 3.04
2.10.80	31.97	31.32	+ 1.15
7.11.80	31.76	38.78	+ 7.02
9.1.81	34.26	38.93	+ 4.67
6.2.81	34.83	37.02	+ 2.19
6.3.81	34.83	36.72	+ 1.89
3.4.81	34.83	35.90	+ 1.07
1.5.81	34.82	33.90	- 0.92
5.6.81	34.75	31.84	- 2.91
2.7.81	34.77	31.04	- 3.73
4.9.81	34.66 (34.32)	31.48	- 3.18
2.10.81	34.64 (34.32)	31.58	- 3.06
6.11.81	33.95	32.88	- 1.11
4.12.81	33.96	33.12	- 0.84
8.1.82	33.74	33.28	- 0.46
5.2.82	33.68	30.74	- 2.94
5.3.82	33.36	28.69	- 4.67
2.4.82	33.24	27.92	- 5.32
7.5.82	33.16	31.69	- 1.47
4.6.82	33.14	32.10	- 1.04
2.7.82	33.23	31.33	- 1.90
6.8.82	33.18	30.87	- 2.31
3.9.82	33.18	31.60	- 1.58
1.10.82	33.18	32.41	- 0.77
5.11.82	33.18	32.10	- 1.08
3.12.82	33.17	29.73	- 3.43
7.1.83	33.17	29.90	- 3.27
14.1.83	33.17	29.90	- 3.27
21.1.83	33.17	30.48	- 2.69
28.1.83	33.17	29.44	- 3.73
4.2.83	33.17	28.78	- 4.39
11.2.83	33.17	28.78	- 4.39
18.2.83	33.17	28.74	- 4.43
25.2.83	32.87	27.87	- 5.00
4.3.83	32.83	27.56	- 5.27
11.3.83	32.83	27.56	- 5.37
18.3.83	32.83	27.41	- 5.42
25.3.83	23.87	27.35	- 1.52
1.4.83	28.87	27.37	- 1.50
8.4.83	28.51	27.78	- 0.73
15.4.83	28.49	28.07	- 0.42
22.4.83	28.49	28.19	- 0.30
29.4.83	28.49	28.23	- 0.26
6.5.83	28.49	28.13	- 0.36
13.5.83	28.44	27.92	- 0.52
20.5.83	28.44	27.84	- 0.60
27.5.83	28.44	27.99	- 0.45
3.6.83	28.44	28.05	- 0.39
15.7.83	28.44	28.40	- 0.04

*=The weightings given are based on each nation's production relative to OPEC total

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assesment since June. 1980 (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assesment	DIFFERENCE (+) Premium (-) Discount
10.6.83	28.44	28.04	- 0.40
17.6.83	28.44	28.14	- 0.30
24.6.83	28.44	28.22	- 0.22
1.7.83	28.44	28.20	- 0.24
8.7.83	28.44	28.20	- 0.24
22.7.83	28.44	28.42	- 0.02
29.7.83	28.46	28.46	--
5.8.83	28.46	28.54	+ 0.08
12.8.83	28.47	28.53	+ 0.06
19.8.83	28.48	28.49	+ 0.01
26.8.83	28.48	28.42	- 0.06
2.9.83	28.48	28.40	- 0.08
9.9.83	28.48	28.37	- 0.11
16.9.83	28.48	28.27	- 0.21
23.9.83	28.48	28.33	- 0.15
30.9.83	28.48	28.22	- 0.26
7.10.83	28.48	28.03	- 0.45
14.10.83	28.48	28.28	- 0.20
21.10.83	28.48	28.26	- 0.22
28.10.83	28.48	28.19	- 0.29
4.11.83	28.48	28.08	- 0.40
11.11.83	28.48	28.00	- 0.48
18.11.83	28.48	27.90	- 0.58
23.11.83	28.48	27.79	- 0.69
2.12.83	28.48	27.93	- 0.55
9.12.83	28.48	27.87	- 0.61
16.12.83	28.48	27.78	- 0.70
23.12.83	28.48	27.74	- 0.74
30.12.83	28.48	27.83	- 0.65
6.1.84	28.48	27.91	- 0.57
13.1.84	28.48	27.95	- 0.53
20.1.84	28.48	27.97	- 0.51
27.1.84	28.48	28.06	- 0.42
3.2.84	28.48	28.08	- 0.40
10.2.84	28.48	28.03	- 0.45
17.2.84	28.48	28.02	- 0.46
24.2.84	28.48	28.03	- 0.45
2.3.84	28.48	28.06	- 0.42
9.3.84	28.48	28.12	- 0.36
16.3.84	28.48	28.04	- 0.44
23.3.84	28.48	28.02	- 0.46
30.3.84	28.48	28.04	- 0.44
6.1.84	28.48	27.91	- 0.57
13.1.84	28.48	27.95	- 0.53
20.1.84	28.48	27.91	- 0.51
27.1.84	28.48	28.06	- 0.42
3.2.84	28.48	28.08	- 0.40
10.2.84	28.48	28.03	- 0.45
17.2.84	28.48	28.02	- 0.46
24.2.84	28.48	28.03	- 0.45
7.3.84	28.48	28.03	- 0.45
16.3.84	28.48	28.02	- 0.46

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assesment since June. 1980 .) (Contd...)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assesment	DIFFERENCE (+) Premium (-) Discount
23.3.84	28.48	28.04	- 0.44
6.4.84	28.48	28.06	- 0.42
13.4.84	28.48	28.08	- 0.40
19.4.84	28.48	28.15	- 0.33
27.4.84	28.48	28.12	- 0.36
4.5.84	28.48	28.08	- 0.40
18.5.84	28.48	28.14	- 0.34
25.5.84	28.48	28.06	- 0.42
1.6.84	28.48	27.41	- 1.07
8.6.84	28.48	27.51	- 0.97
15.6.84	28.48	27.30	- 1.18
22.6.84	28.48	27.09	- 1.39
29.6.84	28.48	27.94	- 1.54
6.7.84	28.48	27.08	- 1.40
13.7.84	28.48	27.06	- 1.42
20.7.84	28.48	26.91	- 1.57
27.7.84	28.48	26.59	- 1.89
31.8.84	28.48	26.70	- 1.78
10.8.84	28.48	26.98	- 1.50
17.8.84	28.48	27.03	- 1.45
24.8.84	28.48	27.20	- 1.28
7.9.84	28.48	27.36	- 1.12
14.9.84	28.48	27.43	- 1.05
21.9.84	28.48	27.49	- 0.99
28.9.84	28.48	27.62	- 0.86
5.10.84	28.48	27.38	- 1.10
12.10.84	28.48	27.41	- 1.07
19.10.84	28.18	26.81	- 1.37
26.10.84	28.18	27.57	- 0.61
2.11.84	27.92	27.47	- 0.44
9.11.84	27.89	27.33	- 0.56
16.11.84	27.89	27.16	- 0.73
21.11.84	27.88	27.08	- 0.80
30.11.84	27.88	26.84	- 1.04
7.12.84	27.88	26.93	- 0.94
14.12.84	27.88	26.79	- 1.09
21.12.84	27.88	26.77	- 1.10
28.12.84	27.88	26.96	- 0.92
4.1.85	27.98	26.95	- 1.03
11.1.85	28.05	27.06	- 0.99
18.1.85	27.87	26.95	- 0.92
25.1.85	27.87	26.88	- 0.99
1.2.85	27.59	26.85	- 0.74
8.2.85	27.67	27.11	- 0.56
15.2.85	27.67	27.14	- 0.53
22.2.85	27.66	27.14	- 0.55
1.3.85	27.66	27.11	- 0.58
8.3.85	27.67	27.08	- 0.54
15.3.85	27.62	27.13	- 0.55
22.3.85	27.54	27.07	- 0.47
29.3.85	27.53	27.03	0.50

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assesment since June. 1980 .) (Contd...)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assesment	DIFFERENCE (+) Premium (-) Discount
4.4.85	27.53	27.00	- 0.53
12.4.85	27.53	26.98	- 0.55
19.4.85	27.53	26.93	- 0.61
26.4.85	27.49	26.81	- 0.68
2.5.85	27.49	26.61	- 0.88
10.5.85	27.48	26.38	- 1.10
17.5.85	27.40	25.94	- 1.46
24.5.85	27.40	25.84	- 1.56
19.7.85	27.40	25.88	- 1.52
2.8.85	27.21	25.99	- 1.22
9.8.85	27.24	26.03	- 1.21
16.8.85	27.35	26.22	- 1.13
23.8.85	27.39	26.31	- 1.08
30.8.85	27.42	26.57	- 0.85
6.9.85	27.42	26.69	- 0.73
13.9.85	27.37	26.50	- 0.87
20.9.85	27.37	26.50	- 0.87
27.9.85	27.37	26.76	- 0.61
4.10.85	27.41	26.52	- 0.49
11.10.85	27.41	26.88	- 0.53
18.10.85	27.43	26.89	- 0.54
25.10.85	27.35	26.79	- 0.56
1.11.85	27.32	29.79	- 0.52
8.11.85	27.33	26.85	- 0.48
15.11.85	27.33	27.02	- 0.31
22.11.85	27.31	27.19	- 0.12
29.11.85	27.00	27.02	- 0.32
6.12.85.	27.34	26.32	- 0.95
13.12.85	27.28	26.28	- 0.98
20.12.85	27.26	26.32	- 0.94
27.12.85	27.26	26.33	- 0.93
3.1.86	27.26	26.16	- 1.02
10.1.86	27.18	25.12	- 1.89
24.1.86	27.01	20.27	- 5.98
31.1.86	26.25	19.01	- 6.90
7.2.86	25.91	17.80	- 8.01
14.2.86	25.81	16.86	- 8.60
21.2.86	25.46	16.25	- 9.00
28.2.86	24.25	13.94	- 10.40
7.3.86	24.34	13.18	- 11.06
14.3.86	24.24	13.27	- 11.02
21.3.86	24.20	12.11	- 11.96
28.3.86	27.07	27.03	0.50

Source:- Petroleum Inteligence Weekly.

Development of Spot Prices of Key OPEC Crude Oils since January 1984.

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export)31	Iraq Basrah 34	UAE Murban 39.10	Qutar Dukhtar 10
1984							
January	28.64	26.35	28.03	27.38	28.64	28.98	28.78
Feburary	28.61	26.66	28.21	27.48	28.61	28.98	28.95
March	28.57	26.87	28.10	27.40	28.57	28.98	28.95
April	28.45	26.99	28.06	27.49	28.45	29.13	28.91
May	28.43	27.08	27.98	27.49	28.43	28.08	28.81
June	28.12	27.12	27.56	26.99	28.19	28.91	28.65
July	27.72	26.70	26.72	26.33	27.72	28.17	27.92
August	27.79	26.75	27.01	26.56	27.78	27.99	27.80
September	27.94	27.06	27.89	27.21	27.94	28.16	27.90
October	27.85	26.80	27.76	27.23	27.79	28.08	27.88
November	27.96	26.59	27.20	27.15	27.30	28.00	27.84
December	27.78	26.29	26.83	26.70	27.09	27.76	27.74
1985							
January	28.08	26.70	27.51	27.21	27.63	28.15	28.13
Feburary	27.41	26.65	27.53	27.40	27.89	28.15	28.13
March	27.81	26.63	27.40	27.36	27.81	28.00	27.88
April	27.66	26.53	27.20	27.00	27.66	27.85	27.66
May	27.01	25.59	26.19	25.83	26.19	27.06	26.72
June	26.79	25.05	25.93	25.21	25.93	26.56	26.35
July	27.05	25.19	26.13	25.49	26.13	26.98	26.89
August	27.50	25.39	26.59	25.83	26.58	27.70	27.49
September	27.49	25.66	27.53	26.35	27.53	28.04	27.79
October	27.80	25.78	27.52	26.75	27.55	27.93	27.93
November	27.86	25.81	27.04	26.73	27.24	27.88	27.88
December	26.92	25.17	26.42	25.92	26.93	27.17	27.17
1986							
January	23.65	22.20	23.60	22.70	23.55	23.90	23.80
Feburary	15.88	14.38	15.88	14.88	15.88	16.19	16.00
March	13.13	11.25	13.13	12.13	13.13	13.44	13.40
April	11.17	9.83	11.17	10.33	11.17	11.50	11.50

Source: Monthly OPEC Bulletins.

QUARTERLY DEVELOPMENT OF SPOT PRICES OF MAJOR PETROLEUM PRODUCTS IN KEY TRADING CENTRES OF THE WORLD DURING 1985-86

Product/Type	Unit	1985-1986			
		1st. Quarter	2nd Quarter	3rd Quarter	4th Quarter
1.	2.	3.	4.	5.	6.
I. NAPHTHA:	US $/US Gallon				
1. N.W. Europe	"	68.0	67.0	64.8	42.7
2. Mediterranean	"	66.1	65.7	62.5	40.0
3. Caribbean	"	73.6	72.3	71.5	45.8
4. Arabian/P.Gulf	"	63.0	64.3	61.5	37.2
5. Singapore	"	66.5	66.8	64.2	39.1
II. REGULAR GASOLINE:	US$/US G.				
1. N.W. Europe	"	75.4	75.9	73.0	50.2
2. Mediterranean	"	73.1	72.9	72.2	48.0
3. Caribbean	"	74.2	74.2	74.0	48.4
4. Arabian/P.Gulf	"	69.0	70.3	66.7	43.2
5. Singapore*	"	73.5	76.3	75.0	52.3
III. JET KEROSINE:	US$/US Gallon				
1. N.W. Europe	"	75.7	76.9	85.1	67.0
2. Mediterranean	"	74.8	77.5	82.2	65.0
3. Caribbean	"	74.2	74.1	N.A.	N.A.
4. Arabian/P.Gulf	"	71.7	73.5	81.8	67.4
5. Singapore	"	73.0	77.2	85.5	67.3
IV. GAS OIL:	US$/US Gallon				
1. N.W. Europe	"	69.7	73.8	81.2	62.1
2. Mediterranean	"	68.4	72.0	80.2	57.0
3. Caribbean	"	71.0	70.7	81.0	56.3
4. Arabian/P.Gulf	"	68.8	70.0	76.2	52.9
5. Singapore	"	70.0	68.8	75.0	54.9
V. FUEL OIL	$/Barrel				
1. N.W. Europe(1% Sulfer)	"	22.91	22.28	22.43	17.83
2. Mediterranean(1% Sulfer)	"	22.49	21.41	22.07	15.92
3. Caribbean (1% Sulfer)	"	22.29	21.35	21.07	15.61
4. Arabian/P.Gulf(3.5%Sulfer)	"	22.36	20.96	21.13	15.56
5. Singapore(3.5% Sulfer)	"	22.84	22.26	22.49	15.85

* = For Premium Gasoline.

SOURCE: Petroleum Inteligence Weekly.

DEVELOPMENT OF LOWEST POSTED PRICES OF POL PRODUCTS AT BANDAR MAHSHAR/QUOIN ISLAND

PRICE AS ON	U.S. Cent/U.S. Gallon							US $ Barrel	
	Naphtha Whole (A-316)	Octane 93	Octane 87	Octane 83	Turbine Fuel	Kerosene	Diesal Index	Indl. Diesel	Light Fuel
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.1.70	-	9.0	7.9	7.1	9.5	8.9	6.6	2.62	1.42
1.1.71	-	9.0	7.9	7.1	9.5	8.9	6.6	2.70	1.50
1.1.72	-	9.9	8.7	8.0	10.4	9.8	7.5	3.20	1.95
1.1.73	-	10.2	8.9	8.3	10.7	10.1	7.8	3.32	2.07
1.1.74	-	17.3	N.R.	15.4	18.6	18.3	15.7	6.16	3.75
1.1.75	-	35.9	N.R.	34.0	33.7	33.4	30.8	12.11	10.05
1.1.76	-	38.3	N.R.	36.4	36.7	36.4	33.6	12.86	10.80
1.1.77	-	38.3	N.R.	36.4	36.7	36.4	33.6	12.86	10.50
1.1.78	-	41.2	N.R.	39.0	39.6	39.2	36.5	14.35	11.85
1.1.79	-	44.0	41.5	40.5	43.5	42.5	40.5	-	11.15
1.1.80	91.5*	79.3	77.0	76.0	77.5	76.5	73.0	-	22.35
1.1.81	87.0**	106.3	104.0	102.5	110.0	105.0	102.0	-	31.04
1.1.82	86.0**	107.8	105.5	104.0	113.5	112.5	106.5	-	32.95
1.1.83	83.0**	100.8	98.5	97.0	110.0	107.0	103.0	-	31.25
1.1.84	71.5**	91.0	86.0	85.0	88.0	87.5	83.0	-	28.35
1.1.85	62.5	88.5	84.0	83.0	87.0	-	77.0	-	27.85
1.1.86	63.0	85.5	81.0	80.0	86.0	-	80.5	-	25.50
11.8.86	21.50	45.5	41.0	40.0	39.0	-	37.0	-	9.50

* = Ex-Ras Tanura
** = Ex-Kuwait
NR = Not Reported
SOURCE: Platt's Oil Grams.

RETAIL PRICES INCLUDING DUTY AND TAXES OF SOME SELECTED PRODUCTS IN DIFFERENT COUNTRIES AS ON 1.1.1985.

US $/USG

COUNTRY	REGULAR GASOLINE			HOUSE HOLD KEROSENE		
	Consumer Price	Tax (1)	Custom Duty(2)	Consumer Price	Tax (1)	Custom Duty (2)
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA:						
Canada	1.55	0.39	N.A.	1.35	N.A.	N.A.
Mexico	1.07	0.69	N.A.	0.42	0.05	N.A.
United States	1.15	0.21	.0125	1.06	N.A.	.0025
CENTRAL SOUTH AMERICA AND CARBEAN:						
Argentina	1.79	1.24	0.38	0.69	0.17	0.14
Brazil	1.92	N.A.	N.A.	1.12	N.A.	N.A.
Venezuela	0.40	0.09	N.A.	0.25	Neg.	N.A.
EUROPE:						
Austria	2.03	1.28	0.06	2.51	1.38	0.03
Belgium	1.87	1.03	N.A.	0.79	0.11	N.A.
Denmark	2.01	1.15	N.A.	1.08	0.20	N.A.
France	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
West Germany	1.59	0.61	0.08	N.A.	N.A.	N.A.
Italy	2.43	1.65	0.15	1.09	0.32	0.07
Netherlands	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
U.Kingdom(London)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Yugoslavia	1.88	0.37	N.A.	0.94	0.32	N.A.
MIDDLE EAST:						
S.Arabia	0.26	0.10	N.A.	0.17	0.06	N.A.
Israel	1.67	0.56	N.A.	1.32	0.30	N.A.
Turkey	1.45	0.24	N.A.	0.83	0.15	N.A.
AFRICA						
Ethiopia	2.18	0.23	0.23	0.97	N.A.	N.A.
Ghana	1.33	0.03	N.A.	0.62	0.01	N.A.
South Africa	4.64	0.54	0.85	2.30	0.23	Neg.
ASIA:						
India*	3.01	N.A.	N.A.	0.86	N.A.	N.A.
Indonesia	1.36	0.14	N.A.	0.47	0.05	N.A.
Japan	2.22	0.91	0.03	0.94	N.A.	0.01
Pakistan	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Philippines	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Singapore	1.98	0.99	0.99	0.82	0.02	0.02
Sri Lanka	N.A.	N.A.	N.A.	0.77	0.03	0.04
Thailand	1.50	0.63	0.40	0.69	0.12	0.01
AUSTALASIA:						
Australia	1.43	0.11	0.30	N.A.	N.A.	N.A.

N.A.= Not Available. * = Ex-Bombay price as on 17.3.85.

Neg = Negligible, less than .5 US cents.

1. = Tax includes value added tax whenever applicable.

2. = Custom duty value is nil unless amount is given.

SOURCE: International Energy Annual, 1984.

RETAIL PRICES INCLUDING DUTY AND TAXES OF SOME SELECTED PRODUCTS IN DIFFERENT COUNTRIES AS ON 1.1.1985.

(US $/Barrel)

COUNTRY	DISTILLATE FUEL OIL			MEDIUM FUEL OIL		
	Consumer Price	Tax (1)	Custom Duty(2)	Consumer Price	Tax (1)	Custom Duty (2)
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA:						
Canada	45.78	N.A.	N.A.	N.A.	N.A.	N.A.
Mexico	25.40	3.31	N.A.	10.83	1.39	N.A.
United States	34.85	N.A.	0.1050	33.68	N.A.	0.1050
CENTRAL SOUTH AMERICA AND CARIBBEAN:						
Argentina	25.11	10.64	5.27	17.07	7.56	3.04
Brazil	26.30	N.A.	N.A.	24.00	N.A.	N.A.
Venezuela	5.94	0.02	N.A.	N.A.	N.A.	N.A.
EUROPE:						
Austria	N.A.	N.A.	N.A.	42.89	12.00	0.01
Belgium	41.40	6.79	N.A.	40.74	5.92	N.A.
Denmark	43.32	14.82	N.A.	47.64	14.71	N.A..
France	56.14	14.37	N.A.	N.A.	N.A.	N.A.
West Germany	45.29	1.23	1.50	N.A.	N.A.	N.A.
Italy	54.14	12.01	1.80	N.A.	N.A.	N.A.
Netherlands	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
U.Kingdom(London)	N.A.	1.63	N.A.	N.A.	N.A.	N.A.
Yugoslavia	64.55	11.51	N.A.	35.77	0.74	N.A.
MIDDLE EAST:						
S.Arabia	3.78	2.22	N.A.	N.A.	N.A.	N.A.
Israel	52.59	15.38	N.A.	33.09	6.84	N.A.
Turkey	41.58	7.37	0.01	30.27	5.26	N.A.
AFRICA						
Ethiopia	46.58	6.53	6.53	41.48	N.A.	N.A.
Ghana	31.34	0.71	N.A.	N.A.	N.A.	N.A.
South Africa	139.25	30.42	4.84	139.25	30.42	4.84
ASIA:						
Burma	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
India*	60.62	N.A.	N.A.	57.62**	N.A.	N.A.
Indonesia	35.78	3.58	N.A.	32.53	3.25	N.A.
Japan	56.29	17.85	1.18	38.78	N.A.	0.79
Pakistan	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Philippines	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Singapore	36.13	N.A.	N.A.	34.18	N.A.	N.A.
Sri Lanka	53.38	2.14	4.0	28.11	1.13	N.A.
Thailand	38.98	5.93	3.08	10.47	N.A.	N.A.
AUSTALASIA:						
Australia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

NA= Not Available. * = Ex-Bombay price as on 17.3.85. **= For non-fertilizer use.
1. = Tax includes value added tax whenever applicable.
2. = Custom duty value is nil unless amount is given.

SOURCE: International Energy Annual, 1984.

RETAIL PRICES INCLUDING DUTY AND TAXES OF SOME SELECTED PRODUCTS IN DIFFERENT COUNTRIES AS ON 1.1.1985.

US $/USG

COUNTRY	AUTO DIESEL OIL			L.P. GAS		
	Consumer Price	Tax (1)	Custom Duty(2)	Consumer Price	Tax (1)	Custom Duty (2)
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA:						
Canada	1.35	0.32	N.A.	N.A.	N.A.	N.A.
Mexico	0.51	0.30	N.A.	0.16	0.02	N.A.
United States	1.16	0.27	0.0025	0.79	N.A.	N.A.
CENTRAL SOUTH AMERICA AND CARIBBEAN:						
Argentina	0.60	0.25	0.13	0.55	N.A.	0.06
Brazil	1.13	N.A.	N.A.	0.98	N.A.	N.A.
Venezuela	0.18	N.A.	N.A.	0.56	N.A.	N.A.
EUROPE:						
Austria	1.24	0.50	0.03	0.44	0.09	0.02
Belgium	1.04	0.26	N.A.	1.18	0.17	N.A.
Denmark	0.80	0.31	N.A.	1.06	0.28	N.A.
France	1.38	0.39	N.A.	N.A.	N.A.	N.A.
West Germany	1.18	0.45	N.A.	0.80	N.A.	N.A.
Italy	0.96	0.20	0.04	1.10	0.11	0.02
Netherlands	1.17	0.22	N.A.	N.A.	N.A.	N.A.
U.Kingdom(London)	1.30	0.52	N.A.	N.A.	N.A.	N.A.
Yugoslavia	1.30	0.23	N.A.	0.74	N.A.	N.A.
MIDDLE EAST:						
S.Arabia	0.11	0.06	N.A.	0.21	0.08	N.A.
Israel	1.34	0.35	N.A.	1.21	0.22	N.A.
Turkey	0.84	0.15	N.A.	0.37	0.77	0.03
AFRICA						
Ethiopia	1.22	0.13	0.13	1.29	0.12	0.12
Ghana	0.98	0.02	N.A.	0.38	0.02	N.A.
South Africa	4.14	0.71	0.72	2.36	0.24	N.A.
ASIA:						
Burma	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
India*	1.42	N.A.	N.A.	0.80@	N.A.	N.A.
Indonesia	0.72	0.07	N.A.	0.71	0.07	N.A.
Japan	1.32	0.37	0.02	1.86	0.23	N.A.
Pakistan	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Philippines	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Singapore	0.81	0.09	0.09	1.41	0.07	0.07
Sri Lanka	0.98	0.04	0.07	0.64	0.01	N.A.
Thailand	0.78	0.12	0.06	0.75	0.04	N.A.
AUSTALASIA:						
Australia	1.23	0.33	0.26	0.40	N.A.	N.A.

NA= Not Available. *= Ex-Bombay price as on 17.3.85. @ = For domestic use
1. = Tax includes value added tax whenever applicable.
2. = Custom duty value is nil unless amount is given.
SOURCE: International Energy Annual, 1984.

Consumer/Retail Prices of Petroleum Products in Selected Developed and Developing countries during Jan 1986

Country	Motor Spirit	Kero-sene	HSDO	LDO	F.O.	ATF	LPG (domestic)	Exchange rate adopted/used
	(. . . . . Rs. Per Litre . . . . . .)						(Rs/KGM.)	
Developing Countries								
1. Argentina	5.54	2.66	2.72	2.40	1.77	2.05	4.91	1 Re. = 0.064 Peso Australia
2. Afganistan	3.32	2.32	2.32	2.32	-	-	6.69	1 Re. = 6.03 Afgs.
3. Bangla Desh	6.03	2.96	2.96	2.78	-	3.92	3.52	1 Re. = 2.50 B.Taka
4. Brazil	4.31	3.08	2.95	-	1.52	2.18(D) 3.21(I)	3.20	1 Re. = 1037 Cruzerio
5. China	-	3.50	2.40	3.40	-	-	-	1 Re. = 0.2176 Yuans
6. Indonesia	4.61	2.10	2.83	2.57	-	3.85	3.89	1 Re. = 85.6 Ind.Rupiah
7. India@ (Delhi)	7.43	2.25	3.50	3.40	3.25	5.76(D)	4.06	
8. Rep. of Korea	9.07	4.00	3.80	-	2.55	3.09	8.79	1 Re. = 72.8 Won
9. Malaysia	5.48	3.49	3.24	2.79	2.24	3.81	6.68	1 Re. = M $ 0.2006
10. Tanzania	14.55	5.51	6.36	5.55	4.41	5.47	9.30	1 Re. = T $ 1.36
11. Thailand	4.53	2.70	2.98	2.89	1.85	-	2.30	1 Re. = 2.25 Baht
12. Philippines	5.25	3.96	4.01	4.01	2.91	5.35	6.53	1 Re. = P $ 6.60
13. Pakistan	6.41-7.12	2.74	3.53	2.49	1.43	7.06	N.A.	1 Re. = 1.205 Pak Rupee
14. Sri Lanka	6.16	3.00	3.71	4.23	2.38	3.87	5.09	1 Re. = SL Rs.2.19
	(6.36)	(3.16)	(3.38)	(3.24)	(2.42)	(4.22)	(5.41)	
Range of Prices	3.32-9.07	2.10-5.51	2.32-6.36	2.32-5.55	4.41-4.41	2.05-7.06	2.30-8.79	
II. Developing Countries								
1. Japan	8.71	4.51	5.63	-	3.37-3.51	-	13.65	1 Re. = 17.22 Yen
2. Australia	4.40	-	4.15	-	-	4.40	2.24	1 Re. = 0.1204 Austrlian $
3. Newzealand	5.14	4.00	3.98	2.68	2.57	4.19	5.52	1 N.Z. $ Rs.5.7143
4. France	7.58	-	5.97	2.31	4.08	4.49	15.22	1 Re. = 0.68 F.Franc
5. W.Germany	6.28-6.60	-	6.42	3.46	1.97	3.31	13.78	1 D.Mak = Rs.4.85
6. Yugoslavia	5.40	4.75	3.60	-	-	4.70	6.10	1 Re. = N.Dinar 24.13
7. Switzerland	6.20	-	6.55	2.52	1.98	2.77	-	1 Re. = .1984 Swiss Franc
	(6.39)	(4.42)	(5.19)	(2.74)	(2.81)	(3.98)	(9.42)	
Range of prices	4.40-8.71	4.00-4.75	3.60-6.55	2.31-3.46	1.97-3.51	2.77-4.70	2.24-15.22	
Estd. CIF unit prices (excl. taxes/duties etc.)	2.20-2.60	2.50-2.90	2.30-2.70	2.00-2.30	1.60-1.90	2.50-2.90	3.00-3.40	

@ Price relate to Feb.1986. Figures in brackets indicate average prices.

POSTED AIRFIELD PRICES OF JET A.I. FUEL AT MAJOR INTERNATIONAL AIRPORTS AS ON IST APRIL OF EACH YEAR

(U.S. $/U.S. Gallon)

Countries/Port	Prices of Jet A.I. Fuel as on 1st April							
	1979	1980	1981	1982	1983	1984	1985	1986
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Australia								
Perth	63.00	114.88	142.61	140.82	127.53	140.50	114.02	87.02
Sydney	63.00	114.88	142.61	140.82	127.53	140.50	114.02	87.02
Bahrain	76.50	153.40	167.68	165.03	148.42	148.46	148.46	120.00
Belgium								
Brussels	76.00	159.00	174.00	174.00	164.00	135.00	128.00	105.00
Egypt								
Cairo	120.00	155.20	162.77	162.77	121.13	121.13	121.13	105.00
Ethiopia								
Addisababa	80.00	156.06	182.24	183.41	176.38	151.45	150.32	146.66
France								
Paris	72.03	147.90	150.00	145.00	145.00	128.00	117.24	138.29
Germany								
Frankfurt	120.00	147.32	142.31	136.78	146.50	135.00	107.69	112.84
Holland								
Amsterdam	84.47	142.60	159.80	138.00	126.00	124.13	115.00	120.00
Italy								
Rome	110.00	165.00	155.00	145.00	153.00	135.00	135.00	135.00
Kenya								
Nairobi	78.00	144.00	175.00	180.00	168.10	168.10	168.10	157.61
Lebanon								
Beirut	80.00	185.00	185.00	185.00	185.00	165.00	165.00	165.00
Malaysia								
Kualalumpur	67.00	137.00	155.00	145.00	145.00	135.00	135.00	135.00
Mauritius								
Plaisance	72.00	140.00	150.00	150.00	145.00	145.00	126.00	125.00
Singapore								
Paya lebar /changi	65.00	137.00	152.50	151.00	141.00	128.50	128.50	128.50
Switzerland								
Geneva	98.60	155.73	155.51	144.20	132.40	129.76	105.58	118.94
U.A.E.								
Abu Dhabi	79.98	154.88	172.09	169.40	110.00	106.61	100.45	73.28
Sharjah/Dubai	76.50	154.88	172.09	169.40	147.64	147.60	147.58	119.93
UNITED KINGDOM								
London (H)	140.00	154.76	177.92	173.17	151.66	150.14	129.89	132.14
Kerachi	79.24	123.28	173.76	175.50	175.80	175.50	175.50	175.50
Kuwait	56.29	113.96	135.11	132.60	112.76	106.07	98.15	82.44
New York (2)	65.00	112.00	108.19	96.90	87.25	83.50	77.75	59.87
Tehran (1)	62.00	100.96	137.89	132.13	122.13	122.13	122.13	116.23
Tokyo								
Narita	72.00	118.96	128.00	128.05	114.45	97.00	95.00	86.76
Bombay	74.78	145.22	159.80	140.51	131.87	121.92	106.07	105.75
Delhi								
Palam	79.85	150.22	166.83	149.43	134.09	124.71	108.92	108.75

* = Less rebate 2.00 $ USG. (1) Monopoly Price (2) Air India Contract Price.

Wholesale Prices of OPEC's Represntative Crudes in Current And Constant(1980) $

Period	Wholesale price@ of OPEC's representative crudes in current($/bbl.) S.Arabia (Ras Tanura)	Libya (Es Sider)	Venezuela (Tia Juana)	Index of consumer Prices indl. countries (1980=100)	Price of crude oil 1980 $ ($/bbl.) S.Arabia (Ras Tanura)	Libya (Es Sider)	Venezuela (Tia Juana)
1.	2.	3.	4.	5.	6.	7.	8.
1970	1.30	2.58	1.73	43.6	2.98	5.92	3.97
1971	1.65	3.17	2.21	45.9	3.59	6.91	4.81
1972	1.90	3.37	2.37	48.0	3.96	7.02	4.94
1973	2.70	4.80	3.56	57.7	4.68	8.32	6.17
1974	9.76	13.84	10.24	58.6	16.66	23.62	17.47
1975	10.72	11.59	10.89	65.1	16.47	17.80	16.73
1976	11.51	12.31	11.28	70.5	16.33	17.46	16.00
1977	12.40	13.87	12.42	76.4	16.23	18.15	16.26
1978	12.70	13.71	12.42	81.9	15.51	16.74	15.16
1979	17.26	21.06	16.77	89.4	19.31	23.56	18.76
1980	28.67	35.87	27.60	100.0	28.67	35.87	27.60
1981	32.50	39.83	32.03	109.9	29.57	36.24	29.14
1982	33.47	35.49	32.03	118.1	28.34	30.05	27.12
1983	29.31	30.89	28.05	124.1	23.62	24.89	22.60
1984	28.47	30.15	27.03	130.0	21.90	23.19	20.79
1985	28.00	30.15	27.03*	135.5	20.66	22.25	19.95
1985 Ist Qr.	28.00*	30.15	27.03	133.4	20.99	22.60	20.26
IInd Qr.	28.00	30.15	27.03	135.3	20.69	22.28	19.98
IIIrd Qr.	28.00	30.15	27.03	136.1	20.57	22.15	19.86
IVth Qr.	28.00*	30.15	27.03*	137.2	20.41	21.98	19.70

* = Estimated.
@ = Source International Financial Statistics.

Wholesale price of OPEC's representatives crudes in terms of SDRs.

Period	Wholesale price of OPEC's representative crudes in current$(s/bbl.) S.Arabia (Ras Tanura)	Libya (Es Sider)	Venezuela (Tia Juana)	SDR/US $ exchange rates	Price in SDR s/bbl. S.Arabia (Ras Tanura)	Libya (Es Sider)	Venezuela (Tia Juana)
1.	2.	3.	4.	5.	6.	7.	8.
1970	1.30	2.58	1.73	1.00000	1.30	2.58	1.73
1971	1.65	3.17	2.21	0.99702	1.65	3.16	2.20
1972	1.90	3.37	2.37	0.92105	1.75	3.10	2.18
1973	2.70	4.80	3.56	0.83883	2.26	4.03	2.99
1974	9.76	13.84	10.24	0.83150	8.12	11.51	8.52
1975	10.72	11.59	10.89	0.82362	8.83	9.55	8.97
1976	11.51	12.31	11.28	0.86616	9.97	10.66	9.77
1977	12.40	13.87	12.42	0.85652	10.62	11.88	10.64
1978	12.70	13.71	12.42	0.79872	10.14	10.95	9.92
1979	17.26	21.06	16.77	0.77399	13.36	16.30	12.98
1980	28.67	35.87	27.60	0.76833	22.03	27.56	21.21
1981	32.50	39.83	32.03	0.84806	27.56	33.78	27.16
1982	33.47	35.49	32.03	0.90579	30.32	32.15	29.02
1983	29.31	30.89	28.05	0.93545	27.42	28.90	26.24
1984	28.47	30.15	27.03	0.97560	27.78	29.41	26.37
1985	28.00	30.15	27.03*	0.98489	27.58	29.69	26.62
1985 Ist Qr.	28.00	30.15	27.03	1.03416	28.96	31.18	27.95
IInd Qr.	28.00	30.15	27.03	1.00775	28.22	30.38	27.24
IIIrd Qr.	28.00	30.15	27.03*	0.97352	27.26	29.35	26.31
IVth Qr.	28.00*	30.15	27.03*	0.92743	25.97	27.96	25.07

* = Estimated.

Source: International Financial Statistics.

WORLD TANKER FLEET BY FLAG 1981 TO 1985

(Million dwt)

FLAG	1981	1982	1983	1984	1985	Percentages Change 1985 over 1984	Percentage Share of Total 1985
Liberia	91.6	84.4	76.4	71.8	63.0	-12.2	25.6
Panama	14.4	15.9	15.0	14.9	16.8	+12.3	6.8
USA	16.4	16.8	16.5	15.6	15.2	- 2.9	6.2
France	13.2	11.6	10.4	8.9	5.6	-36.6	2.3
Greece	27.0	23.7	21.1	19.1	18.3	- 4.2	7.4
Norway	24.4	21.2	18.9	15.7	8.5	-45.9	3.4
United Kingdom	21.3	17.6	15.3	13.3	12.4	- 6.5	5.0
Other Western Europe	36.6	35.4	34.9	36.5	33.1	- 9.2	13.4
Japan	29.7	28.5	26.3	24.9	23.3	- 6.6	9.4
Others	35.4	39.0	39.1	38.5	40.2	+ 4.6	16.3
Total NCW	310.0	294.1	273.9	259.2	236.4	- 8.8	95.8
Centrally-Planned Economies (CPEs)	10.2	9.6	9.3	10.5	10.4	- 0.7	4.2
Total World	320.2	303.7	283.2	269.7	246.8	- 8.5	100.0

SOURCE: B.P. Statistical Review of the World Energy.

WORLD TANKER FLEET BY SIZE 1981 TO 1985

(Million dwt)

Size of Tanker	1981	1982	1983	1984	1985	Percentages Change 1985 over 1984	Percentage Share of Total 1985
10-25 000 dwt	13.8	13.5	13.0	12.8	12.3	- 3.9	5.0
25-45 000 dwt	26.0	27.2	27.4	26.3	25.8	- 1.9	10.5
45-65 000 dwt	16.6	16.1	15.3	15.7	15.0	- 4.5	6.1
65-125 000 dwt	55.4	51.8	48.4	46.2	44.4	- 3.9	18.0
125-200 000 dwt	31.2	30.2	28.8	28.9	28.4	- 1.7	11.5
200-320 000 dwt	146.5	134.5	120.4	111.6	94.9	-15.0	38.4
320 000 dwt and over	30.7	30.4	29.9	28.2	26.0	- 7.8	10.5
Total World	320.2	303.7	283.2	269.7	246.8	- 8.5	100.0

WORLD TANKER FLEET TONNAGE SCRAPPED 1981 TO 1985

(Million dwt)

Size of Tanker	1981	1982	1983	1984	1985	Percentages Change 1985 over 1984	Percentages Share of Total 1985
10-25 000 dwt	0.5	0.9	0.8	1.2	0.7	-47.6	2.5
25-45 000 dwt	0.8	1.2	1.1	1.5	1.2	-21.6	4.5
45-65 000 dwt	0.9	3.6	4.2	2.7	2.2	-19.8	8.3
80-100 000 dwt	0.3	1.6	1.2	0.9	2.0	+125.0	7.5
100-160 000 dwt	0.7	1.6	1.0	0.7	1.1	+56.5	4.1
160 000 dwt and over	8.8	12.7	15.2	11.1	19.3	+73.9	73.1
Total World	12.0	21.6	23.5	18.1	26.5	+45.3	100.0

SOURCE: B.P. Statistical Review of the World Energy.1986

INTER-AREA TOTAL OIL MOVEMENTS 1985

(Million Tonnes)

1.	U.S.A. 2.	Canada 3.	Latin America 4.	Western Europe 5.	Africa 6.	South East Asia 7.
USA	-	3.9	15.1	9.2	0.5	3.6
Canada	37.7	-	-	0.4	-	-
Latin America	102.6	6.1	16.5	41.4	2.8	3.6
Western Europe	24.1	3.5	0.7	-	3.2	0.2
Middle East	21.0	2.3	30.4	144.2	16.7	66.4
North Africa	10.2	1.6	4.7	82.6	1.0	-
West Africa	25.2	0.6	8.4	48.3	4.0	0.5
East & Southern Africa	-	-	-	0.1	0.8	-
South Asia	-	-	-	0.9	-	0.2
South East Asia	20.3	-	-	2.1	1.3	-
Japan	-	-	-	-	-	0.8
Australasia	2.0	-	-	-	-	1.8
USSR, E.Europe & China	5.2	-	15.2	83.3	0.2	23.5
Total Imports	248.3	18.0	91.0	412.5	30.5	100.6

(Million Tonnes)

	Japan 8.	Austra-lasia 9.	Rest of World 10.	Desti-nation not known* 11.	Total 12.
USA	5.9	0.2	0.4	3.0	41.8
Canada	0.1	-	-	-	38.2
Latin America	7.5	-	2.3	-	182.8
Western Europe	0.2	0.1	4.5	4.2	40.7
Middle East	129.6	3.1	32.9	-	446.6
North Africa	2.6	-	13.1	-	115.8
West Africa	-	0.1	1.2	-	88.3
East & Southern Africa	-	-	-	-	0.9
South Asia	0.5	-	-	0.5	2.1
South East Asia	38.4	4.3	3.7	3.7	73.8
Japan	-	-	-	-	0.8
Australasia	3.2	-	-	-	7.0
USSR, E.Europe & China	14.2	0.2	80.8	2.6	225.2
Total Imports	202.2	8.0	138.9	14.0	1264.0

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

Source = BP Statistical Review of World energy.1986

WORLD PRIMARY ENERGY CONSUMPTION BY FUEL - 1985*.

(Million Tonnes Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Hydro-Electric	Nuclear Energy	Total
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA						
USA	724.1	444.5	443.3	82.9	104.6	1799.4
Canada	67.7	50.4	30.6	63.9	14.0	226.6
Total North America	791.8	494.9	473.9	146.8	118.6	2026.0
Latin America	209.5	69.9	25.0	75.2	1.3	380.9
WESTERN EUROPE:						
Austria	9.8	4.6	3.6	7.5	-	25.5
Belgium & Luxembourg	20.2	8.4	10.9	0.1	7.4	47.0
Denmark	10.8	0.6	7.1	-	-	18.5
Finland	10.8	0.8	3.4	3.1	4.5	22.6
France	83.9	23.3	24.1	12.9	45.1	189.3
Greece	12.0	0.1	6.0	0.9	-	19.0
Iceland	0.5	-	-	1.1	-	1.6
Republic of Ireland	3.8	1.7	2.7	0.2	-	8.4
Italy	85.0	27.3	15.5	11.1	1.8	140.7
Netherlands	29.1	33.0	7.0	-	0.9	70.0
Norway	8.8	-	0.6	22.8	-	32.2
Portugal	8.2	-	0.5	3.3	-	12.0
Spain	44.0	2.3	18.7	7.4	6.3	78.7
Sweden	16.9	0.1	2.5	11.1	10.0	40.6
Switzerland	12.3	1.0	0.4	8.4	5.5	27.6
Turkey	18.9	-	10.6	3.7	-	33.2
United Kingdom	77.8	47.9	61.9	1.3	13.0	201.9
West Germany	114.0	41.4	79.3	4.1	28.5	267.3
Cyrus/Gibraltar/Malta	1.8	-	0.2	-	-	2.0
Total Western Europe	568.6	192.5	255.0	99.0	123.0	1238.1
Middle East	98.8	40.2	2.2	2.8	-	144.0
Africa	82.8	25.9	67.8	17.6	1.0	195.1
Japan	201.3	36.0	72.6	21.8	33.6	365.3
South East Asia	112.8	17.6	36.2	6.3	11.4	186.3
South Asia	53.4	17.5	105.0	19.1	1.1	196.1
Of which India@	42.5	4.5	103.2	3.4	0.3	153.9
Australasia	30.8	15.7	36.1	8.8	-	91.4
Total NCW	2149.8	910.2	1075.8	397.4	290.0	4823.2
Centrally-Planned Economies(CPEs):						
China	87.6	11.5	509.4	25.8	-	634.3
USSR	447.7	477.2	361.9	53.5	36.0	1376.3
Others	124.3	92.9	330.7	21.5	11.1	580.5
Total CPEs	659.6	581.6	1202.0	100.8	47.1	2591.1
Total World	2809.4	1491.8	2277.8	498.2	337.1	7414.3

@ Estemated on the basis of financial year (despatches of coal, oil and Natural Gas)

+ Less than 0.05

* Primary energy comprises commercially traded fuels only. Excluded therefore are fuels such as wood,peat and animal waste,which,though important in many countries,are unreliably documented in terms of consumption statistics.1986

SOURCE: BP Statistical Review of World energy.

NOTE : Figures for India inserted.

ESTIMATED PER CAPITA PRIMARY ENERGY CONSUMPTION-SOME INTERNATIONAL COMPARISONS (1985).

(Kgm.Oil Equivalent)

COUNTRY/AREA	Oil	Natural Gas	Coal	WATER POWER	Nuclear Energy	Total
1.	2.	3.	4.	5.	6.	7.
1. WESTERN HEMISPHERE:	1494	843	744	331	179	3591
Of which						
NORTH AMERICA	2994	1871	1792	555	448	7660
U.S.A.	3029	1859	1854	347	438	7527
Canada	2662	1982	1203	2513	551	8911
2. EASTERN HEMISPHERE:	431	130	217	66	64	908
a) Western Europe	1329	450	596	231	288	2993
of which						
Austria	1296	609	476	992	-	3573
Belgium & Luxembourg	1967	818	1061	10	721	4577
Italy	1487	478	271	194	32	2462
Netherlands	2010	2279	483	-	62	4834
Norway	2120	-	145	5594	-	7759
Portugal	802	-	49	32	-	1173
Spain	1127	59	479	190	161	2016
Sweden	2024	12	299	1329	1198	4862
Switzerland	1910	155	62	1305	854	4286
Turkey	384	-	215	75	-	674
U.K.	1374	846	1093	23	230	3565
Germany West	1863	677	1296	67	466	4369
Yugoslavia	640	177	757	260	52	1886
b) Middle East	911	371	20	26	-	1328
c) Africa	158	49	129	34	2	372
d) South Asia of	53	17	103	19	1	193
which india	57	6	138	(5)		206
e) South East Asia	258	40	87	15	26	426
f) Japan	1666	298	601	180	278	3023
g) Australasia	1317	671	1544	376	-	3908
3. Centrally Planned Economies(CPEs):	445	392	811	68	32	1748
h) U.S.S.R.	1618	1725	1308	193	130	974
i) China	83	11	480	24	-	598
j) Others	861	643	2290	149	77	4020
4. WORLD (Excl.CPEs):	646	273	323	119	87	1448
5. WORLD (Incl.CPEs):	584	310	473	103	70	1540

SOURCE: i) BP Statistical Review of the World June, 1986. Figures for India Inserted
ii) World Development Report, 1985 and International Financial Statistics, May, 1986 for population.

ESTIMATED PER CAPITA CONSUMPTION OF MAIN PETROLEUM PRODUCTS-SOME INTERNATIONAL COMPARISONS (1985)

kg./per capita

Country/Area	Gasoline	Middle Distillates	Fuel	Others*	Total
1.	2.	3.	4.	5.	6.
U.S.A.	1275	852	277	625	3029
Canada	1078	865	220	499	2662
W.Europe	318	529	282	205	1334
Japan	338	526	525	277	1666
Australasia	577	445	124	171	1317
India	3	32	11	11	57
Rest of New	41	80	69	34	224
Total NCW	187	217	130	112	646

* = Includes refinery gas, LPG, solvents, petroleum Coke, bitumen and refinery fuel and loss.

Sources: 1. BP Statistical Review of World Energy-June, 1986.
2. World Development Report, 1985 for population

Note : Figures for India Inserted.

TRENDS IN WORLD PRIMARY ENERGY/CONSUMPTION

(Million/Tonnes Oil Equivalent)

YEAR	Oil	Natural Gas	Solid Fuels	Hydro-Electricity	Nuclear Energy	Total
1.	2.	3.	4.	5.	6.	7.
1970	2281.8	928.7	1635.4	305.4	19.8	5171.1
1971	2413.0	996.7	1631.6	317.6	28.0	5386.9
1972	2592.4	1045.0	1629.4	323.3	38.4	5628.5
1973	2798.0	1068.1	1668.4	331.5	49.4	5913.4
1974	2760.2	1088.1	1691.2	343.7	62.4	5945.6
1975	2724.8	1084.5R	1708.4R	353.4R	86.1	5957.2R
1976	2894.6	1145.7R	1785.2R	358.4R	105.1	6289.0R
1977	2985.9	1167.8R	1830.2R	367.6R	130.4	6481.9R
1978	3083.0	1214.0R	1861.0R	399.2R	149.5	6706.7R
1979	3125.0	1283.1R	1968.8R	417.2R	152.9R	6947.0R
1980	2998.6R	1308.1R	2002.3R	427.5R	169.2R	6905.7R
1981	2899.5R	1331.9R	2005.1R	438.2R	198.9R	6873.6R
1982	2815.4R	1329.6R	2046.1R	458.5R	220.8R	6870.4R
1983	2783.7R	1345.5R	2099.6R	479.8R	244.7R	6953.3R
1984	2823.0R	1444.1R	2175.4R	493.1R	291.6R	7227.2R
1985	2809.4	1491.8	2277.8	498.2	337.1	7414.3

SOURCE: Various issues of B.P. Statistical Review of World Energy.
R = Revised.

PRIMARY ENERGY/CONSUMPTION IN SELECTED COUNTRIES/AREAS OF THE WORLD - 1970, 1975, 1980, 1983 AND 1985.

(Million Tonnes Oil eqvt.)

COUNTRY/AREA	1970	1975	1980	1983	1985	% Share of total 1985
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA						
USA	1659.8	1711.8	1842.0	1718.9	1799.4	24.3
Canada	162.7	195.0	226.1	212.0	226.6	3.1
Total North America	1822.5	1906.8	2068.1	1930.9	2026.0	27.4
Latin America	189.6	254.0	339.6	361.4	380.9	5.1
WESTERN EUROPE:						
Austria	21.1	23.4	26.5	24.2	25.5	0.3
Belgium & Luxembourg	48.8	46.7	50.4	44.1	47.0	0.6
Denmark	20.4	18.2	19.5	15.8	18.5	0.2
Finland	15.8	17.4	21.6	21.4	22.6	0.3
France	157.7	171.1	189.3	181.9	189.3	2.6
Greece	10.0	17.0	17.4	17.4	19.0	0.3
Iceland	1.6	2.0	1.9	1.5	1.6	+
Republic of Ireland	6.5	7.1	8.5	8.2	8.4	0.1
Italy	121.9	132.9	145.8	138.5	140.7	1.9
Netherlands	60.5	71.3	73.8	64.8	70.0	0.9
Norway	24.2	28.8	30.4	30.9	32.2	0.4
Portugal	6.6	8.8	11.4	12.0	12.0	0.2
Spain	44.2	61.9	76.5	79.2	78.7	1.1
Sweden	38.3	39.2	41.1	38.3	40.6	0.5
Switzerland	21.4	23.5	26.5	26.6	27.6	0.4
Turkey	12.7	19.7	24.5	28.2	33.2	0.5
United Kingdom	215.3	204.3	203.8	194.2	201.9	2.7
West Germany	236.7	242.6	270.5	251.0	267.3	3.6
Cyrus/Gibraltar/Malta	1.0	1.1	1.5	1.6	2.0	+
Total Western Europe	1064.7	1137.0	1240.9	1179.8	1238.1	16.7
Middle East	69.2	94.6	117.1	133.2	144.0	1.9
Africa	91.3	106.2	157.7	182.8	195.1	2.6
Japan	285.1	330.5	359.6	342.4	365.3	4.9
South East Asia	70.5	99.5	153.4	169.8	186.3	2.5
South Asia	91.9	105.7	139.1	172.7	196.1	2.6
Of which India*/R	62.8	86.6	106.6	134.5	153.9	2.0
Australasia	57.2	69.1	83.7	86.1	91.4	1.3
Total NCW	3742.0	4103.4	4658.7	4559.1	4823.2	65.0
Centrally-Planned Economies(CPEs):						
China	289.7	410.4	518.0	552.9	634.3	8.6
USSR	748.9	969.8	1169.0	1284.8	1376.3	18.6
Others	386.5	473.6	560.0	556.5	580.5	7.2
Total CPEs	1425.1	1853.8	2247.0	2394.2	2591.1	35.0
Total World	5167.1	5952.2	6905.7	6953.3	7414.3	100.0

*/R= Estimated on the basis of Financial year data (despatches offtake. for coal, oil products and Natural Gas) and using energy petroleum productivity and conversion factors as given in "BP Statistical Review of World Energy-

/Figres for earlier years have been revised.

+ = Less than 0.05.

SOURCE: BP Statistical Review of World Energy.

NOTE : Figure for India Inserted.

COMMERCIAL PRIMARY ENERGY PRODUCTION AND CONSUMPTION BY COUNTRY GROUPS - 1970-1995

(Million b/d of oil Equivalent)

COUNTRY	1970		1980		1995	
	Production	Consumption	Production	Consumption	Production	Consumption
1.	2.	3.	4.	5.	6.	7.
I. Industrial Market Economics	43.2	63.1	49.9	74.2	69.1	92.0
Petroleum	12.6	32.1	14.1	36.8	13.5	34.1
Natural Gas	13.1	13.0	13.6	14.6	14.0	17.5
Solid Fuels	12.8	13.3	14.0	14.6	24.9	23.7
Primary Electricity	4.7	4.7	8.2	8.2	16.7	16.7
II. Non-Market Industrial Economics	28.0	27.2	45.0	43.2	63.2	62.5
Petroleum	8.1	7.8	14.8	13.9	15.7	16.3
Natural Gas	3.9	3.9	8.4	8.0	15.9	14.8
Solid Fuels	15.0	14.5	19.7	19.2	25.9	25.7
Primary Electricity	1.0	1.0	2.1	2.1	5.7	5.7
III. Capital Surplus Oil Exporters.	11.8	0.7	17.4	1.6	15.7	3.0
Petroleum	11.7	0.6	16.5	0.9	14.2	1.8
Natural Gas	0.1	0.1	0.9	0.7	1.5	1.2
Solid Fuels	-	-	-	-	-	-
Primary Electricity	-	-	-	-	-	-
IV. Developing Countries	18.0	9.0	22.5	15.9	42.5	33.1
i) Oil Exporters	14.6	2.9	16.9	5.1	29.0	11.1
Petroleum	13.6	2.0	15.0	3.6	21.9	5.9
Natural Gas	0.7	0.6	1.5	1.1	5.7	3.6
Solid Fuels	0.1	0.1	0.1	0.1	0.4	0.6
Primary Electricity	0.2	0.2	0.3	0.3	1.0	1.0
ii) Oil Importers	3.4	6.1	5.6	10.8	13.5	22.0
Petroleum	1.1	3.7	1.0	6.2	1.8	9.0
Natural Gas	0.2	0.2	0.4	0.4	1.5	1.6
Solid Fuels	1.5	1.6	2.6	2.6	5.2	6.4
Primary Electricity	0.6	0.6	1.6	1.6	5.0	5.0
TOTAL WORLD	101.0	100.0	134.8	134.9	190.5	190.6
Petroleum	47.1	46.2	61.4	61.4	67.1	67.1
Natural Gas	18.0	17.8	24.8	24.8	38.6	38.7
Solid Fuels	29.4	29.5	36.4	36.5	56.4	56.4
Primary Electricity	6.5	6.5	12.2	12.2	28.4	28.4
Bunkers & Others						

Average. Annual Growth Rate of World Supplies (%)

	1970-80	1980-85
Total World	2.9	2.3
Petroleum	2.7	0.6
Natural Gas	3.3	3.0
Solid Fuels	2.2	3.0
Primary Electricity	6.5	5.8

SOURCE: World Bank Development Report-1983.

ECONOMIC INDICATORS OF OPEC NATIONS DURING 1985

Country	Population 1985 mid (Million)	GNP 1985 (Billion $)	Per capita GNP 1985($)	Oil exports 1985 (Bn.$)	Total exports FOB (Bn.$)	Oil export as % of total export	Value of imports (Bn.$)	Oil reserves 1.1.86 (Bn.bbls)	Gas reserves 31.12.85 (Bn.CM)	Producing oil wells 31.12.85	Refining capacity 31.12.85	Exports of products (1985)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Algeria	21.60	53.09	2458	8.18	12.24	67	10.44	8.82	3032	835	471	385.3
Ecuador	9.38	12.67	1351	1.73	2.70	64	1.61	1.18	115	276	95	13.3
Gabon	1.15	2.97	2578	1.35	1.95	69	1.05	0.68	19	250	44	4.2
Indonesia	163.39	78.06	478	8.56	18.49	46	10.26	8.50	1982	5637	837	150.3
Iran, IR	44.75	171.47	3832	12.88	13.19	98	13.50	59.00	13860	237	615	39.4
Iraq	15.90	33.20	2088	12.46	12.60	99	12.00	65.00	821	N.A.	366	70.0
Kuwait	1.71	24.38	14257	9.69	10.13	96	6.50	92.46	1337	371	614	511.8
Libya	3.77	25.70	6817	10.92	10.93	100	6.11	21.30	606	1024	333	90.9
Nigeria	99.59	53.89	541	12.19	12.55	97	8.88	16.60	1340	1113	234	27.9
Qatar	0.30	5.90	19667	3.23	3.54	91	1.25	4.50	4440	184	63	21.4
Saudi Arabia	11.52	91.20	7916	27.50	29.00	95	23.30	171.49	3543	1045	1548	514.8
U.A.E.	1.33	25.70	19323	12.49	14.25	88	7.02	32.99	3148	632	162	71.7
Venezuela	7.32	48.06	2775	10.35	12.27	84	8.18	27.20	1742	10859	1229	542.0
TOTAL	391.71	626.28	1599	131.51	153.85	86	110.09	509.72	35684 (36%)	22909	6611 (9%)	2446.0 (25%)

Figures in brackets are OPEC's share to total world.

PART—II
PLAN STATISTICS

1.SEVENTH PLAN

SEVENTH PLAN OUTLAYS (1985-90) AND ANNUAL PLAN OUTLAY/EXPENDITURE FOR 1985-86 AND 1986-87 FOR MINISTRY OF PETROLEUM AND NATURAL GAS

(Rs/Crores)

Undertaking	Seventh Plan Outlay 1985-90	Annual Plan Outlay 1985-86 Outlay	Annual Plan Outlay 1985-86 Likely Expd.	Annual Plan Outlay 1986-87 Outlay
1.	2.	3.	4.	5.
A) Exploration & Production				
1. ONGC	8753	2250	2100	2250
2. OIL	950	280	188	201
3. GAIL	950	100	@396	316
SUB TOTAL (A)	10653	2630	2684	2767
B) 1. IOC	796	136	146	205
2. BPCL	285	90	99	101
3. HPCL	292	156	122	103
4. MRL	33	17	14	16
5. CRL	28	14	20	12
6. BRPL	2	2	1	Neg.
7. Lubrizol India Ltd..	18	5	5	4
8. Engineers India Ltd.	21	14	10	8
9. M/o Petroleum & NG	500	21	--	--
SUB TOTAL (B).	1975	455	417	449
TOTAL (A+B)	12628	3085	3101	3216
C. Petrochemicals				
1. BRPL		43	47	40
2. BPCL		13	7	4
3. CRL		8	9	12
4. MRL		2	5	6
5. HPCL		2	Neg.	3
6. Other	Neg.	Neg.	Neg.	Neg.
SUB TOTAL (C).		68	68	65
D. Engineering				
1. IBP Co.Ltd. & Others		20	14	19
GRAND TOTAL (A+B+C).	12628	3173	3183	3300

--Includes 19 Crores which accounts DOP.

Domestic Crude Production Profile-Seventh Plan 1985-90
(in million tonnes)

	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay basin	4.10	4.50	4.90	5.50	6.00	25.00
Upper Assam & Nagaland	2.84	3.03	3.03	3.03	4.40	16.35
Sub-Total	6.94	7.53	7.93	8.53	10.40	41.33
2. OFFSHORE	20.17	20.52	20.52	20.35	20.75	102.31
Total ONGC(1+2)	27.11	28.05	28.45	28.88	31.15	143.64
B. OIL	3.03	3.03	3.03	3.03	3.38	15.50
GRAND TOTAL (A+B)	30.14	31.08	31.48	31.91	34.53	159.14

Source: The Seventh Five Year Plan 1985-90.

Domestic Gas Production Profile-Seventh Plan 1985-90
(in million cu.m)

	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay	1.06	1.09	1.11	1.11	1.11	5.48
Upper Assam	0.42	0.45	0.45	0.45	0.61	2.38
Assam-Arakan Fold Belt (Training etc.)	0.03	0.05	0.08	0.10	0.11	0.37
Sub-Total(1)	1.51	1.59	1.64	1.66	1.83	8.23
2. OFFSHORE						
Bombay (associated)	4.20	4.60	4.74	4.09	4.05	21.68
Bombay (free)	-	-	7.30	7.30	7.67	22.27
Sub Total	4.20	4.60	12.04	11.39	11.72	43.95
TOTAL ONGC (1 + 2)	5.71	6.19	13.68	13.05	13.55	52.18
B. OIL	1.66	1.59	1.49	1.40	1.36	7.50
GRAND TOTAL (A+B)	7.37	7.78	15.17	14.45	14.91	59.68
(million cu. metres/day)	(20.2)	(21.5)	(41.6)	(39.6)	(40.8)	

Source: The Seventh Five Year Plan 1985-90.

TARGETS FOR EXPLORATION ACTIVITY IN SEVENTH PLAN

	Unit	ONGC	OIL	TOTAL
1. Geological and Gravimagnetic Survey	(Party Years)	107	5	112
2. Seismic Surveys:				
Onland	Party Years	284	38	322
Offshore	Thousand (Line metres)	140	17	157
3. Exploratory Drilling:				
Onland	Thousand Metres	1703	346	2049
Offshore	" "	710	62	772
TOTAL	" "	2413	408	2821

SOURCE: Seventh Five Year Plan Report.

SEVENTH PLAN TARGETS FOR OIL SECTOR

	Unit	1984-85 (Actual)	1989-92 (Plan Target)
	2	3	4
1. Production of Crude Oil:			
(i) On shore	Million Tonnes	8.85	13.78
(ii) Offshre	" "	20.14	20.75
TOTAL	" "	28.99	34.53
2. Production of Natural gas			
(i) On shore	Million Cu.Metres	2.83	3.19
(ii) Offshre	" " "	4.41	11.72
TOTAL	" " "	7.24	14.91
3. Refining			
(i) Refiaing Capacity (At yr.end)	Million Tonnes	45.55	51.75
(ii) Crude throughput	" "	36.56	48.04-48.89
(iii) Production of Petroleum Products	" "	33.51	45.06-45.47
4. Net Imports:			
(a) Quantity:			
Crude Oil	" "	7.16	13.51-14.36
Petroleum products	" "	5.16	6.94--7.20
TOTAL		12.32	20.45-21.56
(b) Value of crude oil & petroleum products import	Rs./Crores	3527	5136
5. Demand of petroleum products	Million Tonnes	38.80	52.00-52.67
6. LPG			
(i) Production	MMT	0.87	2.54
(ii) Number of Customers at year end	Lakhs	89.41	196.0
7. Compound Annual Growth Rates During 7th Plan Period	%age per annum		3.6
(i) Production of Crude Oil	" " "		15.5
--Natural Gas	" " "		6.3-6.5
--POL Products	" " "		
(ii) Consumption of all			
--POL Products	" " "		6.4
--Middle Distillates	" " "		6.8

SOURCE: Seventh Five Year Plan Report.

Demand For Petroleum Products 1984-85 To 1999-2000

	1984-85	1989-90	1994-95	1999-2000
Demand for Petroleum Products (Million tonnes)	38.63	52.67	69.00	87.70
Annual Growth rate over the five years ending in the year (%)	5.30	6.40	5.50	4.90
Share of middle distillates (%)	58.10	59.40	63.19	66.19

Source: Seventh Five Year Plan.

Import Availability Ratios of Crude Oil & POL Products 1979-80 To 1989-90

	1979-80	1983-84	1984-85	1989-90
A. CRUDE OIL				
1. Production	11766	26020	28990	34530
2. Imports	16121	10445*	7164*	13510-14360
3. Availability (net)	27887	36465	36154	48040-48890
4. (2) as per cent of (3)	57.81	28.64	19.82	28.12-29.37
B. POL PRODUCTS				
1. Production	25794	33149	33513	45060-45470
2. Imports	4724	4328	6092	6940-7200
3. Availability (gross)	30518	37477	39605	52000-52670@
4. (2) as per cent of (3)	15.48	11.55	15.38	13.35-13.67

* Net of crude exports. @ of this, 1.5 million tonnes is assumed to be available for export.
Source: Seventh Five Year Plan.

Value of Crude Oil & POL Products Imports During the Seventh Plan Period
(Rs./Crores)

Y E A R	Value* of Crude and POL Products Imports
1984-85	3527
1989-90	5136
Seventh Plant Total	22273

* Net of crude exports.
Source: Seventh Five Year Plan.

PART–III
FINANCIAL PERFORMANCE/ STRUCTURE AND QUICK REVIEW

FINANCIAL REVIEW/STRUCTURE OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS DURING 1984-85, AND QUICK REVIEW DURING 1985-86.

FINANCIAL STRUCTURE/REVIEW 1984-85.

The financial structure of the Public/Joint Sector Undertakings as per their Annual published Accounts/data submitted by them for three years ending 1984-85 has been given in the attached statements. The glossary of the terms has been given at the end. The Public Sector Undertakings have been divided into four broad categories viz.,(A) Oil Exploration & Production (B) Refining & Marketing (C) Petrochemicals & (D) Engineering Units. In the review/analysis that follows, consolidated financial position of all the undertakings has been given followed by an analysis of the consolidated position under each of the above mentioned categories.

OVER ALL FINANCIAL POSITION.

A consolidated picture of the financial structure and performance of the 16 Public Sector Undertakings for three years viz.,1982-83, 1983-84 and 1984-85 is provided in the tables 1 to 3. The following is the summary of the results.

(Rs./Crores)

	1982-83	1983-84	1984-85
1.1.Ordinary Share Capital	683.23	711.26	830.56
1.1.Preference Share Capital	0.50	0.50	0.50
Total paid up Capital	683.73	711.76	831.06
2. Reserves & Surplus	2237.74	3216.38	4271.32
3. Loans	2347.84	3247.65	4038.70
4. Net Worth	2855.59	3883.49	4964.97
5. Capital employed	3986.72	5164.77	6654.95
5.1.Net Fixed Assets	2955.57	3726.42	4737.38
5.2.Working Capital	1031.15	1438.35	1917.57
6. Sales turnover	18680.42	20606.00	22388.96
7. Adjusted gross profit	1915.94	2336.69	2500.07
8. Adjusted net Profit	966.34	1016.65	1201.38
9. Dividend paid	55.81	60.52	74.34
10. Corporate Tax	706.38	1012.81	920.54

An analysis of the individual items in briefly discussed as under:

CAPITAL INVESTMENT:

The Capital investment defirred as the sum total of the paid up capital and loans registered an increase of 23% from Rs.3959.41 crores in 1983-84 to Rs.4869.76 crores in 1984-85. The corresponding increase during 1983-84 over 1982-83 was 30.6%. The increase in Capital Investment in 1984-85 over 1983-84 was on account of increase in paid up capital from Rs.711.76 crores to Rs.831.06 crores and also increase in the loans from Rs.3247.65 crores to Rs.4038.70 crores, the increase in the loans being of the order of 24.4%. The break-up of increase in paid up capital and loans in 1984-85 over 1983-84 is as under:

(A) PAID UP CAPITAL

(Rs./Crores)

Name of the undertaking	1983-84	1984-85	% Increase
1.Madras Refineries Ltd.	12.87	98.25	663.4%
2.B.R.P.L.	98.50	132.42	34.4%

(B) LOANS

1.Oil & Natural Gas Comn.	1880.46	2280.32	21.3%
2.Oil India Limited	57.30	65.93	15.0%
3.Indian Oil Corpn.Ltd.	484.12	502.45	3.8%
4.Bharat Petroleum Corpn.	65.35	108.52	66.0%
5.Hindustan Petroleum Corporation Limited	223.90	424.05	89.4%
6.Cochin Refineries Ltd.	143.70	202.20	40.7%
7.Madras Refineries Ltd.	216.65	255.11	17.7%
8.Lubrizol India Ltd.	2.98	5.06	69.8%
9.B R P L.	146.48	164.74	12.5%
10.Balmer Lawrie Ltd.	3.61	4.28	18.6%
11.Biecco Lawrie Ltd.	13.25	16.41	23.8%

The position of the foreign loans during three years viz. 1982-83 to 1984-85 is given below:

(Rs./Crores)

	1982-83	1983-84	1984-85
Foreign loans	2347.84	3247.65	4038.70
Total loans	897.96	1089.23	1532.55
%of Foreign loans to total loans	38.3%	33.5%	38.0%

ONGC's foreign loans were the highest of all the undertakings in all the three years.

With the increase in the loans, the equity/loans ratio declined from 0.22 in 1983-84 to 0.21 in 1984/85.

CAPITAL EMPLOYED:

Capital employed defined as the sum total of net fixed assets and working capital of the Public Sector Undertakings went up by 28.8% from Rs.5164.77 crores in 1983-84 to Rs.6654.95 crores in 1984-85. The corresponding increase in the preceeding year was of the order of 29.6%. The break up of the figures has revealed that the major increase in the Capital Employed was on account of increase in the net fixed assets and working capital in respect of the under noted companies.

(A) NET FIXED ASSETS

(Rs./Crores)

Name of the Company	1983-84	1984-85	% increase
1. ONGC	2641.36	3217.34	21.8%
2. Oil India Ltd.	85.20	104.88	23.1%
3. Indian Oil Corpn.	649.08	658.41	1.4%
4. Bharat Petroleum Corpn.	66.64	189.70	184.6%
5. Hindustan Petroleum Corpn.	120.01	253.11	110.9%
6. Cochin Refineries Ltd.	9.85	33.81	243.3%
7. Madras Refineries Ltd.	32.38	149.77	362.5%
8. Engineers India Ltd.	16.73	18.18	8.7%
9. Balmer Lawrie Ltd.	6.89	7.71	11.9%
10.Bridge & Roof Co.(I)	3.24	4.82	48.7%

(B) WORKING CAPITAL

1. Oil & Natural Gas Commn.	252.71	699.52	176.8%
2. Oil India Limited	84.88	125.66	48.0%
3. Bharat Petroleum Corpn.	121.92	133.29	9.3%
4. Hindustan Petroleum Corpn.	106.37	153.92	44.7%
5. Cochin Refineries Ltd.	46.82	58.64	25.3%
6. Madras Refineries Ltd.	80.59	192.93	139.4%
7. IBP Co. Ltd	1.48	3.86	160.8%
8. Lubrizol India Ltd.	13.38	16.76	25.3%
9. Bongargaon Refinery & Petrochemical Ltd.	29.56	42.93	45.2%
10.Engineers India Ltd.	13.92	18.78	34.9%
11.Balmer Lawrie Ltd.	14.47	19.57	35.3%

SALES TURNOVER:

Sales turnover of all the companies put together increased by 8.6% of from Rs.20606/- crores in 1983-84 to Rs.22388.96 crores in 1984-85. The corresponding increase in the preceeding year was of the order of 11.3%. The increase in the sales turnover contributed to an increase in the adjusted Gross profit. The gross profit expressed as a percentage of sales turnover went down from 11.3% in 1983-84 to 11.2% in 1984-85. Out of the total sales achieved in 1984-85, the shares of the companies having large chunk in sales in the Oil Sector is as under:

1.	ONGC	18.0%
2.	IOC	49.3%
3.	BPCL	9.5%
4.	HPCL	12.0%
5.	Others	11.2%
	: TOTAL :	100.0%

PROFITABILITY:

A rising trend is perceptible in the over-all profitability of the Public Sector Undertakings under the Ministry of Petroleum and Natural Gas. The adjusted gross profits have shown an improvement of 7% from Rs.2336.69 crores in 1983-84 to Rs.2500.07 crores in 1984-85. The corresponding increase in the preceeding year was 22%. The adjusted net profits have likewise shown an increase of 18.2% from Rs.1016.65 crores in 1983-84 to Rs. 1201.38 crores in 1984-85. The adjusted net profits expressed as a percentage of paid up capital and net worth stood at 144.6% and 24.2% in 1984-85 as against 142.8% and 26.2% in 1983-84. The return of Capital employed measured in term of gross profit before interest and taxes on Capital Employed went down from 45.2% in 1983-84 to 37.6% in 1984-85.

DIVIDENDS:

There has been an increase in the quantum of dividend in respect of Public Sector Undertakings over the three years. The dividend which stand at Rs.55.81 crores in 1982-83, went upto Rs.60.52 crores in 1983-84 and then to Rs.74.34 crores in 1984-85. The highest amount of dividend declared in absolute terms was in respect of Oil & Natural Gas Commission which paid out Rs.32.57 crores in 1984-85 followed by IOC with a dividend of Rs.17.26 crores. BRPL, Biecco Lawrie Ltd. and Bridge & Roof Co.(India) Ltd. did not declare any dividend during 1984-85.

CORPORATE TAX:

The contribution made to the National Exchequer by the Public Sector Undertakings by way of taxes was Rs.920.54 crores in 1984-85. The amounts of taxes paid in 1982-83 and 1983-84 was Rs.706.38 crores and Rs.1012.81 crores respectively.

EXPLORATION & PRODUCTION:

This category includes the following three enterprises and the data in respect of the individual companies is given in table Nos.5 to 7 while their consolidated position is provided in Table No.4.

1. Oil & Natural Gas Commission (ONGC)
2. Hydro Carbons India Limited (HCIL)
3. Oil India Limited (OIL)

Summary of the results of these undertakings for the three years is as under:

(Rs./Crores)

	1982-83	1983-84	1984-85
1. Paid up capital	395.85	395.85	395.85
2. Loans	1661.50	1937.76	2346.25
3. Net Worth	1738.50	2615.36	3462.02
4. Capital employed:	2343.64	3109.23	4194.79
4.1.Net Fixed assests	2010.45	2726.56	3322.23
4.2.Working Capital	333.19	382.67	872.56
5. Sales turnover	2768.68	3897.23	4447.25
6. Adjusted gross profit	1537.92	1974.38	2067.18
7. Adjusted Net Profit	778.52	865.51	1043.64
8. Dividends	31.63	35.06	36.77
9. Tax	635.99	934.79	818.31

Salient points of the analysis are given as under:

(I) CAPITAL INVESTMENT:

There has been an increase in the investment of capital from Rs.2333.61 crores in 1983-84 to Rs.2742.10 crores in 1984-85. The corresponding increase in the preceeding year was of the order of 13.4%. The increase in the Capital Investment was on account of increase in the loans of ONGC from Rs.1880.46 crores in 1983-84 to Rs.2280.32 crores in 1984-85. The loans of Oil India Limited have also increased from Rs.57.30 crores to Rs.65.93 crores in the same period. As a result of increase in the loans, the equity/loans ratio came down from 0.24 in 1982-83 to 0.20 in 1983-84 and to 0.17 in 1984-85. There is a declining trend in the equity/loans ratio.

(2) CAPITAL EMPLOYED:

The Capital employed increased from Rs.3109.23 crores in 1983-84 to Rs.4194.79 crores in 1984-85, thereby showing an increase of 34.9%. The corresponding increase in the preceeding year was 32.7%. The increase in the capital employed comprised of increase in Fixed Assets of ONGC and Oil India Limited from Rs.2641.36 crores and Rs. 85.20 crores in 1983-84 to Rs.3217.34 crores and 104.88 crores in 1984-85 respectively. Likewise there was an increase in the requirement of working capital in respect of both the companies in the year under review.

(3) SALES TURNOVER:

The Sales turnover under this category increaed by 14.1% from Rs.3897.23 crores in 1983-84 to Rs.4447.25 crores in 1984-85. The corresponding increase in the preceeding year was 40.8%. The gross profit expressed as a percentage of Sales turnover declined from 50.6% in 1983-84 to 46.5% in 1984-85. The sales in respect of Oil & Natural Gas Commission increased by 16.2% and those of Oil India Limited went down by 2.9% in 1984-85.

PROFITABILITY:

The adjusted gross profit increased by 4.7% from Rs.1974.38 crores in 19843-84 to Rs.2067.18 crores in 1984-85. The ratio of gross profit to capital employed declined from 63.5% in 1983-84 to 49.3% in 1984-85. The adjusted net profits increased from Rs.865.51 crores in 1983-84 to Rs.1043.64 crores in 1984-85, thereby showing an improvement of 20.6%. The ratio of net profit to paid up capital went up from 218.6% in 1983-84 to 263.6% in 1984-85, while that of net profit to Net worth went down from 33.1% to 30.2% in the same period.

DIVIDENDS:

The total dividend declared by ONGC and OIL has been going up from Rs.31.63 crores in 1982-83 to Rs.35.06 in 1983-84 and to Rs.36.77 crores in 1984-85.

CORPORATE TAX.

The contribution made by the undertaking under this category by way of taxes to National Exchequer has inceased from 635.99 crores in 1982-83 to Rs.934.79 crores in 1983-84 but it went down to Rs.818.431 crores in 1984-85.

REFINING & MARKETING:

Financial structure and performance of the individual undertakings have been provided in the table Nos. 9 to 16, while the consolidated summary of refining and marketing has been given in the table No.8. Summary of the results of the undertakings for three years is as under :

(Rs./Crores)

	1982-83	1983-84	1984-85
1. Paid up Capital	180.98	208.01	293.39
2. Loans	564.46	1136.70	1497.67
3. Net Worth	984.68	894.71	1314.25
4. Capital Employed:	1502.53	1882.38	2258.96
4.1.Net Fixed Assets	857.77	894.71	1304.50
4.2.Working Capital	644.76	987.67	954.46
5. Sales Turnover	15629.74	16402.94	17583.31
6. Adjusted gross profit	354.38	335.81	402.51
7. Adjusted net profit	174.58	141.26	147.30
8. Dividend	23.84	25.06	37.13
9. Corporate Tax	65.84	69.59	91.20

An analysis of the salient features is as under :

CAPITAL INVESTMENT:

The Capital Investment under this category increased by 33.2% from Rs.1344.71 crores in 1983-84 to Rs.1791.06 crores in 1984-85. The corresponding increase in the preceeding year was 80.4%. Madras Refineries Limited got its paid up capital increased from Rs.12.87 crores in 1983-84 to Rs.98.25 crores in 1984-85 the increase being of the order of 663.4%.

The loans of the following companies have also substantially increased as indicated below:

(Rs./Crores)

Name of the Company	1983-84	1984-85	%increase
1.Indian Oil Corpn. Ltd.	484.12	502.45	3.8%
2.Bharat Petroleum Corpn.Ltd.	65.35	108.52	66.0%
3.Hindustan Petroleum Corp.Ltd.	223.90	424.05	89.4%
4.Cochin Refineries Ltd.	143.70	202.20	40.70%
5.Madras Refineries Ltd.	216.65	255.11	17.8%
6.Lubrizol India Ltd.	2.98	5.06	69.8%

As a result of change/increase in equity and loans the equity/loans ratio went down from 0.18 in 1983-84 to 0.20 in 1984-85.

CAPITAL EMPLOYED:

The Capital employed by the Refining and Marketing companies increased by 20% from Rs.1882.38 crores in 1983-84 to 2258.96 crores in 1984-85. The corresponding increase in the preceeding year was 25.3%. This increase was made up of the increase in the net fixed assets and working capital (taken together) as indicated below:

(Rs./Crores)

	1983-84	1984-85	%increase
1.Bharat Petroelum Corpn.Ltd.	188.56	322.99	71.3%
2.Hindustan Petroleum Corpn.L.	226.38	407.03	79.6%
3.Cochin Refineries Ltd.	56.67	92.45	63.1%
4.Madras Refineries Ltd.	112.97	342.70	202.30
5.IBP Co. Ltd.	10.60	14.03	32.4%
6.Lubrizol India Ltd.	19.41	24.70	27.3%

SALES TURNOVER:

The Sales turnover of the companies under the category increased by 7.2 from Rs.16402.94 crores in 1983-84 to Rs.17583.31 crores in 1984-85. The increased sales resulted in increased gross profit which when expressed as a percentage of sales turnover stood at 2.3% and was higher by 0.3% in 1984-85 when compared with that of 1983-84.

PROFITABILITY:

The adjusted gross profits and net profits increased from Rs.335.81 crores and Rs.141.26 crores in 1983-84 to Rs.402.51 crores and 147.30 crores in 1984-85 respectively. The return on capital employed when expressed as percentage of gross profit to Capital employed remained the same in 1984-85 as in 1983-84. The percentage of net profit to paid up capital and net worth were 50.2% and 11.2% in 1984-85 as compared with 67.9% and 12.6% in 1983-84 respectively.

DIVIDEND:

During 1984-85 all the companies paid out a total dividend of Rs.37.13 crores in 1984-85 as against Rs.25.06 crores in 1983-84. The amounts paid by the companies during 1982-83 was Rs.23.84 crores.

CORPORATE TAX:

The taxes paid by the Oil companies in this category to National Exchequer amounted to Rs.91.20 crores in 1984-85 as against Rs.69.59 crores in 1983-84. The taxes paid during 1982-83 were Rs.65.84 crores.

PETRO CHEMICALS:

There is one company at present viz.,Bongaigaon Refinery & Petrochemicals Ltd., under the purview of the Ministry of Petroleum and Natural Gas and the other two companies viz.IPCL and Petrofils Cooperative Ltd. have been transferred to Ministry of Industry. The financial structure and performance of BRPL for three yeas has been given in table No.17.

Summary of the results of the Bongaigaon Refinery & Petrochemicals for three years is as under.

(Rs./Crores)

	1982-83	1983-84	1984-85
1. Paid up Capital	98.50	98.50	132.42
2. Loans	99.16	146.48	164.74
3. Net Worth	106.55	108.88	145.61
4. Capital employed	89.71	106.84	121.87
4.1.Net Fixed Assets	72.27	77.28	78.94
4.2.Working Capital	17.44	29.56	42.93
5. Sales turnover	132.42	133.99	163.00
6. Adjusted gross profit	7.51	4.70	5.23
7. Adjusted net profit	6.39	2.53	2.81

An analysis of the salient features is as under:

(A) CAPITAL INVESTMENT:

The total Capital Investment increased by 21.3 % from Rs.244.98 crores in 1983-84 to Rs.297.16 crores in 1984-85. The corresponding increase in the preceeding year was 23.9%. As a result of increase in the loans and equity the equity/loans ratio increased from 0.67 in 1983-84 to 0.80 in 1984-85.

(B) CAPITAL EMPLOYED:

The Capital employed by BRPL increased by 14.0% from Rs.106.84 crores in 1983-84 to Rs.121.87 crores in 1984-85. The corresponding increase in the preceeding year was of the order of 19.0%. The increase in the capital employed in 1984-85 was due to increase in working capital from Rs.29.56 crores in 1983-84 to Rs.42.93 crores in 1984-85 and a little increase of 2% in the net fixed assets.

(C) SALES TURNOVER:

The Sales turnover increased by 21.7% from Rs.133.99 crores in 1983-84 to Rs.163.00 crores in 1984-85. The corresponding increase in the preceeding year was 1.2%, with the increase in the Sales turnover, the adjusted gross profits expressed as percentage of sales turnover decreased from 3.5% in 1983-84 to 3.2% in 1984-85.

(D) PROFITABILITY:

The adjusted gross profits increased by 11.3% from Rs.4.70 crores in 1983-84 to Rs.5.23 crores in 1984-85. Likewise the net profit also increased. The return on Capital employed went down from 4.4% to 4.3%. The ratios of adjusted net profit to paid up capital a net worth which stood at 2.6% & 2.3% at the close of 1983-84 went down to 2.1% & 1.9% in 1984-85.

ENGINEERING UNITS:

There are 4 companies under this category viz.,

1. Engineers India Limited (EIL)
2. Balmer Lawrie Limited (BL)
3. Biecco Lawrie Limited (BL)
4. Bridge & Roof Co.(I)Ltd. (B&R)

The consolidated position of the 4 companies has been given at Table No.18, while those of the individual companies have been provided in table No.19 to 22.

Summary of the results for four companies for the three years is as under :

(Rs./Crores)

	1982-83	1983-84	1984-85
1. Equity	8.40	9.40	9.40
2. Loans	22.72	26.71	30.04
3. Net Worth	25.86	33.72	42.91
4. Capital employed	50.84	66.32	79.33
4.1. Net Fixed Assets	15.08	27.87	31.71
4.2. Working Capital	35.76	38.45	47.62
5. Sales Turnover	149.58	171.84	195.40
6. Adjusted Gross Profit	16.13	21.80	25.15
7. Adjusted net profit	6.85	7.35	7.63
8. Dividend	0.34	0.40	0.44
9. Corporate Tax	4.55	8.43	11.03

The salient features of the analysis are as under:

(A) CAPITAL INVESTMENT:

The Capital Investment under this category has increased 9.2% from Rs.36.11 crores in 1983-84 to Rs.39.44 crores in 1984-85. The corresponding incease in the preceeding yëar was 16%. The increase in the capital investment was due to increase in the loans of Balmer Lawrie and Biecco Lawrie companies.

(B) CAPITAL EMPLOYED:

The capital employed by the Engineering Unit has increased by 19.6% from Rs.66.32 crores in 1983-84 to Rs.79.33 crores in 1984-85. The corresponding increase in the preceeding year was 30.4%. The net fixed assets and working capital are as under :

(A) NET FIXED ASSETS

(Rs./Crores)

	1983-84	1984-85	Percentage +increase -decrease
1. Engineers India Ltd.	16.73	18.18	+ 8.7%
2. Balmer Lawrie Ltd.	6.89	7.71	+ 11.9%
3. Biecco Lawrie Ltd.	1.01	1.00	- 0.9%
4. Birdge & Roof Co.(I)Ltd.	3.24	4.82	+ 48.8%
: T O T A L :	27.87	31.71	+ 13.8%

(B) WORKING CAPITAL

1.Engineers India Ltd.	13.92	18.78	+ 34.9%
2.Belmer Lawrie Ltd.	14.47	19.57	+ 35.2%
3.Biecco Lawrie Ltd.	2.43	2.51	+ 3.3%
4.Bridge & Roof Co.(I)Ltd.	7.63	6.76	- 11.4%
: T O T A L :	38.45	47.62	+ 23.9%

(C) SALES TURNOVER:

The Sales turnover of the under takings under this category increased by 13.7% from Rs.171.84 crores in 1983-84 to Rs.195.40 crores in 1984-85. The corresponding increase in the preceeding year was 14.9%. With the increase in the sales turnover there was an increase in the adjusted gross profit. The ratio of adjusted gross profit to sales turnover which stood at 12.7% at the close of 1983-84, went upto 12.8% at the end of the year 1984-85.

(D) PROFITABILITY:

The adjusted gross profit have increased by 15.4% from Rs.21.80 crores in 1983-84 to Rs.25.15 crores in 1984-85. Likewise, there has been some increase in the adjusted net profit. The return on capital employed, went down from 32.8% to 31.7% in the same period. While the ratio of net profit to paid up capital increased from 78.2% in 1983-84 to 81.2% in 1984-85, that of net profit to net worth went down from 21.8% to 17.8% in the same period.

(E) DIVIDEND:

The dividend declared by EIL & Balmer Lawrie amounted to Rs.44 lakhs in 1984-85 as compared to Rs.40 lakhs paid out by these companies in 1983-84. Biecco Lawrie & Bridge & Roof Co. (India) Ltd. did not declare any dividend during these years.

(F) CORPORATE TAX:

The contribution made by the companies in this category to National Exchequer by way of taxes was Rs.11.03 crores in 1984-85 as compared with Rs.8.43 crores in 1983-84.

QUICK REVIEW OF FINANCIAL STRUCTURE 1985-86.

During 1985-86, there were altogether 16 running enterprises under the purview of Ministry of Petroleum and Natural Gas, three under the category "Exploration and Production", eight under "Refining and Marketing", one under "Petrochemical" and four under "Engineering Units".

According to provisional figures on the financial position/performance of these enterprises available in the E & S Division, the 16 enterprises together employed a total capital of Rs.8736.28 crores and held a paid up capital of Rs.924.37 crores as per details of enterprise-wise on financial structure in Annexure-I. During 1984-85, these enterprises had an annual sales turnover of Rs.24408.29 crores and they earned a gross profit of Rs.2296.97 crores, the corresponding figures in the year 1984-85 being Rs.22388.96 crores and Rs.2351.46 crores respectively. Thus while the sales turnover has registered an increase of 9.2% the gross profit before interest and taxes decreased by 2.3%. The net profit after tax and interest amounted to Rs.1144.09 crores during 1985-86 as against Rs.1124.05 crores in 1984-85. The ratio of net profit to paid up capital and net worth worked out to 123.8% and 18.8% during 1985-86 compared with the figures of 135.2% and 22.6% achieved during 1984-85. The over all financial results for the year 1985-86 under each of above mentioned categories are summarised below.

(Rs./Crores)

	Exploration and production	Refining and Marketing	Petro-Chem.	Engg. Units.	Total
Paid up capital	395.85	328.31	190.81	9.40	924.37
Loans	2580.59	1439.20	139.31	34.22	4193.32
Net Worth	4418.29	1418.86	197.41	52.69	6087.25
Capital employed	5351.29	3012.53	281.15	91.31	8736.28
Sales	4685.58	19299.46	198.24	225.01	24408.29
Gross Profit	1839.86	422.50	4.71	29.90	2296.97
Net Profit	994.01	146.47	- 6.60	10.21	1144.09
Dividend	38.49	42.72	-	0.46	81.74
Corporate Tax	680.95	39.51	-	11.60	732.06
Percentage of					
1.Net profit & paid up capital	251.1	44.6	Negative	108.6	123.8
2.Net profit to net worth	22.5	10.3	Negative	19.4	18.8
3.Gross profit to Capital employed	34.4	14.0	1.7	32.8	26.3
4.Sales to capital employed	87.6	640.6	70.5	246.4	279.4
5.Gross profit to Sales turnover	39.3	2.2	2.4	13.3	9.4
6.Paid up capital to loans ratio	0.15	0.23	1.37	0.27	0.22

It will be seen from the Annexure-I that with the exception of Biecco Lawrie Ltd., all the undertakings under the Ministry of Petroleum and Natural Gas have made gross profits. ONGC has made the highest gross profit of Rs.1701.24 crores with IOC standing as second with Rs.212.41 crores. Oil India Ltd. has made a gross profit of Rs.134.51 crores. Likewise ONGC has earned the highest net profit after tax and interest amounting to Rs.922.89 crores followed by IOC, with a net profit of Rs.98.03 crores. The third to earn highest net profit was Oil India Limited with a profit of Rs.69.07 crores.

FINANCIAL STRUCTURE & PROFITABILITY OF THE UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS DURING 1985-86. (Provisional) (Rs./Lakhs)

ANNEXURE-I.

Name of the Undertaking	Paid-up Capital	Loans	Net Worth	Capital Employed	Sales/ Operating Income	Gross Profit Before Interest & Tax	Net Profit after Tax & Interest	Dividend	Corporate Tax	Net Profit to paid up Capital	% age of Net Profit to Net Worth	% age of Gross Profit to Capital Employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A.Exploration & Production	39585	258059	441829	535129	468558	183986	99401	3849	68095	251.1	22.5	34.4
1. ONGC	34285	251553	400843	501786	426738	170124	92289	3429	61990	269.2	23.0	33.9
2. HIL	2500	----	4939	5102	420	411	205	Nil	206	8.2	4.2	8.0
3. OIL	2800	6506	36047	28241	41400	13451	6907	420	5899	246.7	19.2	47.6
B.Refining & Marketing:	32831	143920	141886	301253	1929946	42250	14647	4279	3951	44.6	10.3	14.0
4. IOC	12327	37668	90718	124350	1112279	21241	9803	1726	3842	79.5	10.8	17.0
5. BPCL	2785	10652	13462	39439	232014	4939	1839	390	----	66.0	13.7	12.5
6. HPCL	6384	49166	17572	73860	322611	8355	1005	543	----	15.7	5.7	11.3
7. CRL	700	23607	1123	23551	54181	725	(-)1541	---	----	Neg.	Neg.	3.0
8. MRL	9825	22013	14417	34365	128064	5574	2627	1474	(-)191	26.7	18.2	16.2
9. IBP Co. Ltd.	290	28	2121	1835	69100	628	420	46	185	144.8	19.8	34.2
10. Lubrizol India Ltd.	480	636	2192	3415	11261	733	476	96	92	99.2	21.7	21.5
11. Indian Oil Blending	40	150	281	438	436	55	18	4	23	45.0	6.4	12.6
C.Petrochemical Units:	19081	13931	19741	28115	19824	471	(-)660	--	--	Neg.	Neg.	1.7
12. BRPL	19081	13931	19741	28115	19824	471	(-)660	--	--	Neg.	Neg.	1.7
D.Engineering Units	940	3422	5269	9131	22501	2990	1021	46	1160	108.6	19.4	32.8
13. EIL	50	200	5188	4444	5400	1900	1050	8	850	2100.0	20.2	42.8
14. Balmer Lawrie Ltd.	189	401	1302	3002	11372	920	315	38	310	166.7	24.2	30.7
15. Biecco Lawrie Ltd.	177	2054	(-)1806	333	654	(-)126	(-)420	--	--	Neg.	Neg.	Neg.
16. Bridge & Roof Co.India Ltd.	524	767	585	1352	5075	296	76	--	--	14.5	13.0	21.9
G.TOTAL (A+B+C+D)	92437	419332	608725	873628	2440829	229697	114409	8174	73206	123.8	18.8	26.3

TABLE NO.1

CONSOLIDATED FINANCIAL STRUCTURE. 1984-85

NAME OF THE COMPANY: ALL CATEGORIES

Rs./Lakhs.

I T E M	Emplora-tion & Pr-oduction.	Refin-ing & M-arketing	Petro-chem-icals	Engine-ering & Other Servicing Units.	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised Capital	8000	43320	2000	1450	72770
2. i) Paid-up Capital	39585	29289	13242	940	83056
ii) Preference Capital	NIL	50	NIL	NIL	50
iii) Reserve & Surpluses	318109	102597	1345	5081	427132
3. i) Total Loans	234625	149767	16474	3004	403870
ii) Of which Foreign	149526	3172	557	NIL	153255
4. Cash Credits/Advances from Banks/Others	1714	32435	1633	1591	37373
5. Net Worth	346202	131425	14561	4291	496497
6. i) Net Fixed Assets	332223	130450	7894	3171	473738
ii) Working Capital	87256	95446	4293	4762	191757
iii) Capital Empl.(i+ii)	419479	225896	12187	7933	665495
7. Sales/Operating Income	444725	1758331	16300	19540	2238896
8. i) Total Emoluments (incl. perks)	16477	17175	343	4705	38700
ii) Of which Bonus	982	1225	NIL	105	2312
iii) Average Emoluments per person p.a.	0.34	0.32	0.27	0.30	0.32
9. Inventories	65717	215597	5081	4227	290622
10. Adjusted Gross Profit	206718	40251	523	2515	250007
11. Adjusted Net Profit	104364	14730	281	763	120138
12. Dividends Declared	3677	3713	NIL	44	7434
13. Corporate Tax	81831	9120	NIL	1103	92054
% Age of:-					
a) Net Profit to Paid-up Capital	263.6	50.3	2.1	81.2	144.6
b) Net Profit to Net Worth	30.2	11.2	1.9	17.8	24.2
c) Gross Profit to Capital Emp.	49.3	17.8	4.3	31.7	37.6
d) Sales to Capital Emp.	106.0	778.4	133.8	246.3	336.4
e) Gross Profit to Sales	46.5	2.3	3.2	12.8	11.2
f) Equity Loan Ratio	0.17	0.20	1.80	0.31	0.21

Source : 1. Annual Reports of the Companies.
2. There is no authorised Capital in respect of ONGC.

TABLE NO.2

CONSOLIDATED FINANCIAL STRUCTURE.1983-84

NAME OF THE COMPANY: ALL CATEGORIES Rs./Lakhs.

I T E M	Emplora-tion & Pr-oduction.	Refin-ing & Marketing	Petro-chemi-cals	Engine-ering & Other Servicing Units.	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised Capital	8000	43320	20000	1450	72770
2. i) Paid-up Capital	39585	20751	9850	940	71126
ii) Preference Capital	---	50	--	--	50
iii) Reserve & Surpluses	224286	92296	1066	3990	321638
3. i) Total Loans	193776	113670	14648	2671	324765
ii) Of which Foreign	106896	1835	192	---	108923
4. Cash Credits/Advances from Banks/Others	3615	50804	1098	1279	56796
5. Net Worth	261536	112553	10888	3372	388349
6. i) Net Fixed Assets	272656	89471	7728	2787	372642
ii) Working Capital	38267	98767	2956	3845	143835
iii) Capital Empl.(i+ii)	310923	188238	10684	6632	516477
7. Sales/Operating Income	389723	1640294	13399	17184	2060600
8. i) Total Emoluments (incl. perks)	14275	14833	273	4866	34247
ii) Of which Bonus	884	1094	NIL	74	2052
iii) Average Emoluments per person p.a.	0.32	0.30	0.25	0.30	0.28
9. Inventories	52879	192823	3521	2996	252219
10. Adjusted Gross Profit	197438	33581	470	2180	233669
11. Adjusted Net Profit	86551	14126	253	735	101665
12. Dividends Declared	3506	2506	NIL	40	6052
13. Corporate Tax	93479	6959	NIL	843	101281
% Age of:-					
a) Net Profit to Paid-up Capital	218.6	67.9	2.6	78.2	142.8
b) Net Profit to Net Worth	33.1	12.6	2.3	21.8	26.2
c) Gross Profit to Capital Emp.	63.5	17.8	4.4	32.8	45.2
d) Sales to Capital Emp.	125.3	871.4	125.4	259.1	398.9
e) Gross Profit to Sales	50.6	2.0	3.5	12.7	11.3
f) Equity Loan Ratio	0.20	0.18	0.67	0.35	0.22

Source : 1. Annual Reports of the Companies.
2. There is no authorised Capital in respect of ONGC in exploration & production category.

TABLE NO.3

NAME OF THE COMPANY: CONSOLIDATED FINANCIAL STRUCTURE. 1982-83
ALL CATEGORIES

Rs./Lakhs.

ITEM	Emplora-tion & Pr-oduction.	Refin-ing & Marketing	Petro-chemi-cals	Engine-ering & Other Servicing Units.	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised Capital	8000	23245	10000	1450	42695
2. i) Paid-up Capital	39585	18048	9850	840	68323
ii) Preference Capital	---	50	---	---	50
iii) Reserve & Surpluses	138865	80905	814	3190	223774
3. i) Total Loans	166150	56446	9916	2272	234784
ii) Of which Foreign	89792	4	---	---	89796
4. Cash Credits/Advances from Banks/Others	---	46038	661	1265	47964
5. Net Worth	173850	98468	10655	2586	285559
6. i) Net Fixed Assets	201045	85777	7227	1508	295557
ii) Working Capital	33319	64476	1744	3576	103115
iii) Capital Empl.(i+ii)	234364	150253	8971	5084	398672
7. Sales/Operating Income	276868	1562974	13242	14958	1868042
8. i) Total Emoluments (incl. perks)	10206	12574	232	3961	26973
ii) Of which Bonus	937	1015	---	71	2023
iii) Average Emoluments per person p.a.	0.24	0.28	0.24	0.23	0.26
9. Inventories	46194	160019	2619	2805	211637
10. Adjusted Gross Profit	153792	35438	751	1613	191594
11. Adjusted Net Profit	77852	17458	639	685	96634
12. Dividends Declared	3163	2384	NIL	34	5581
13. Corporate Tax	63599	6584	NIL	455	70638
% Age of:-					
a) Net Profit to Paid-up Capital	196.7	96.5	6.5	81.6	141.3
b) Net Profit to Net Worth	44.8	17.7	6.0	26.5	33.8
c) Gross Profit to Capital Emp.	65.6	23.6	8.4	31.7	48.0
d) Sales to Capital Emp.	118.1	1040.2	147.6	294.2	468.6
e) Gross Profit to Sales	55.5	2.3	5.7	10.8	10.2
f) Equity Loan Ratio	0.24	0.32	0.99	0.37	0.29

Source : 1. Annual Reports of the Companies.
2. There is no authorised Capital in respect of ONGC in exploration & production category.

TABLE NO.4

CONSOLIDATED FINANCIAL STRUCTURE OF EXPLORATION & PRODUCTION

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	8000	8000	8000
2. i) Paid-up Capital	39585	39585	39585
ii) Preference Capital	---	---	NIL
iii) Reserve & Surpluse	138865	224286	318109
3. i) Total Loans	166150	193776	234625
ii) Of which Foreign	79792	106896	149526
4. Cash Credits/Advances from Banks/Others	---	3615	1714
5. Net Worth	173850	261536	346202
6. i) Net Fixed Assets	201045	272656	332223
ii) Working Capital	33319	38267	87256
iii) Capital Empl.(i+ii)	234364	310923	419479
7. Sales/Operating Income	276868	389723	444725
8. i) Total Emoluments (incl. perks)	10206	14275	16477
ii) Of which Bonus	937	884	982
iii) Average Emoluments per person p.a.	0.24	0.32	0.34
9. Inventories	46194	52879	65717
10. Adjusted Gross Profit	153792	197438	206718
11. Adjusted Net Profit	77852	86551	104364
12. Dividends Declared	3163	3506	3677
13. Corporate Tax	63599	93479	81831
% Age of:-			
a) Net Profit to Paid-up Capital	196.7	218.6	263.6
b) Net Profit to Net Worth	44.8	33.1	30.2
c) Gross Profit to Capital Emp.	65.6	63.5	49.3
d) Sales to Capital Emp.	118.1	125.3	106.0
e) Gross Profit to Sales	55.5	50.6	46.5
f) Equity Loan Ratio	0.24	0.20	0.17

Source : 1. Annual Reports of the Companies.
2. There is no authorised Capital in respect of ONGC.

TABLE NO. 5

FINANCIAL STRUCTURE

NAME OF THE COMPANY : OIL & NATURAL GAS COMMISSION.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	There is no	authorised capital in respect of ONGC.	
2. i) Paid-up Capital	34285	34285	34285
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	126762	204242	289323
3. i) Total Loans	161304	188046	228032
ii) Of which Foreign	89775	105623	146779
4. Cash Credits/Advances from Banks/Others	NIL	3615	1714
5. Net Worth	156805	236192	312116
6. i) Net Fixed Assets	193072	264136	321734
ii) Working Capital	25579	25271	69952
iii) Capital Empl.(i+ii)	218651	289407	391686
7. Sales/Operating Income	240163	347282	403498
8. i) Total Emoluments (incl. perks)	9095	12687	14532
ii) Of which Bonus	851	782	792
iii) Average Emoluments per person p.a.	0.28	0.34	0.35
9. Inventories	39680	46247	58728
10. Adjusted Gross Profit	132631	177010	189628
11. Adjusted Net Profit	71812	79934	95220
12. Dividends Declared	2743	3086	3257
13. Corporate Tax	49000	80200	74500
% Age of:-			
a) Net Profit to Paid-up Capital	209.5	233.2	277.7
b) Net Profit to Net Worth	45.8	33.8	30.5
c) Gross Profit to Capital Emp.	60.7	61.2	48.4
d) Sales to Capital Emp.	109.8	120.0	103.0
e) Gross Profit to Sales	55.2	51.0	47.0
f) Equity Loan Ratio	0.21	0.18	0.15

Source : 1. Annual Reports of the Company.

FINANCIAL STRUCTURE

TABLE NO. 6

NAME OF THE COMPANY : HYDROCARBONS INDIA LIMITED

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	3000	3000	3000
2. i) Paid-up Capital	2500	2500	2500
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	266	2009	2239
3. i) Total Loans	NIL	NIL	NIL
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	NIL	NIL	NIL
5. Net Worth	2408	4509	4739
6. i) Net Fixed Assets	238	NIL	1
ii) Working Capital	2169	4508	4738
iii) Capital Empl.(i+ii)	2407	4508	4739
7. Sales/Operating Income	NIL	NIL	NIL
8. i) Total Emoluments (incl. perks)	2	3	4
ii) Of which Bonus	NIL	NIL	NIL
iii) Average Emoluments per person p.a.	0.26	0.38	0.44
9. Inventories	NIL	NIL	NIL
10. Gross Profit	63	93	486
11. Net Profit	(-)13	(-)10	216
12. Dividends Declared	NIL	NIL	NIL
13. Corporate Tax	76	103	270
% Age of:-			
a) Net Profit to Paid-up Capital	LOSS	LOSS	8.6
b) Net Profit to Net Worth	LOSS	LOSS	4.6
c) Gross Profit to Capital Emp.	2.6	2.0	10.2
d) Sales to Capital Emp.	NIL	NIL	NIL
e) Gross Profit to Sales	NIL	NIL	NIL
f) Equity Loan Ratio	NIL	NIL	NIL

Source : 1. Annual Reports of the Company.
2. Figurs in respect of HIL are as on 31st December of each year mentioned above.

FINANCIAL STRUCTURE

TABLE NO. 7

NAME OF THE COMPANY : OIL INDIA LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	2800	2800	2800
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	11837	18035	26547
3. i) Total Loans	4846	5730	6593
ii) Of which Foreign	17	1273	2747
4. Cash Credits/Advances from Banks/Others	NIL	NIL	NIL
5. Net Worth	14637	20835	29347
6. i) Net Fixed Assets	7735	8520	10488
ii) Working Capital	5571	8488	12566
iii) Capital Empl.(i+ii)	13306	17008	23054
7. Sales/Operating Income	36705	42441	41227
8. i) Total Emoluments (incl. perks)	1109	1585	1941
ii) Of which Bonus	86	102	190
iii) Average Emoluments per person p.a.	0.17	0.23	0.24
9. Inventories	6514	6632	6989
10. Adjusted Gross Profit	21098	20335	16604
11. Adjusted Net Profit	6053	6627	8928
12. Dividends Declared	420	420	420
13. Corporate Tax	14523	13176	7061
% Age of:-			
a) Net Profit to Paid-up Capital	216.2	236.7	318.9
b) Net Profit to Net Worth	41.3	31.8	30.4
c) Gross Profit to Capital Emp.	158.6	119.6	72.0
d) Sales to Capital Emp.	275.8	249.5	178.8
e) Gross Profit to Sales	57.4	47.9	40.3
f) Equity Loan Ratio	0.58	0.49	0.42

Source : 1. Annual Reports of the Company.

TABLE NO. 8

CONSOLIDATED FINANCIAL STRUCTURE

NAME OF THE COMPANY : REFINING AND MARKETING

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	23245	43320	43320
2. i) Paid-up Capital	18048	20751	29289
ii) Preference Capital	50	50	50
iii) Reserve & Surpluse	80905	92296	102597
3. i) Total Loans	56446	113670	149767
ii) Of which Foreign	4	1835	3172
4. Cash Credits/Advances from Banks/Others	46038	50804	32435
5. Net Worth	98468	112553	131425
6. i) Net Fixed Assets	85777	89471	130450
ii) Working Capital	64476	98767	95446
iii) Capital Empl.(i+ii)	150253	188238	225896
7. Sales/Operating Income	1562974	1640294	1758331
8. i) Total Emoluments (incl. perks)	12574	14833	17175
ii) Of which Bonus	1015	1094	1225
iii) Average Emoluments per person p.a.	0.28	0.30	0.32
9. Inventories	160019	192823	215597
10. Adjusted Gross Profit	35438	33581	40251
11. Adjusted Net Profit	17458	14126	14730
12. Dividends Declared	2384	2506	3713
13. Corporate Tax	6584	6959	9120
% Age of:-			
a) Net Profit to Paid-up Capital	96.5	97.9	50.2
b) Net Profit to Net Worth	17.7	12.6	11.2
c) Gross Profit to Capital Emp.	23.6	17.8	17.8
d) Sales to Capital Emp.	1040.2	871.4	778.4
e) Gross Profit to Sales	2.3	2.0	2.3
f) Equity Loan Ratio	0.32	0.18	0.20

Source : 1. Annual Reports of the Company.

TABLE NO. 9

FINANCIAL STRUCTURE

NAME OF THE COMPANY : INDIAN OIL CORPORATION LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	15000	15000	15000
2. i) Paid-up Capital	12327	12327	12327
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	57160	63689	70314
3. i) Total Loans	29530	48412	50245
ii) Of which Foreign	4	NIL	673
4. Cash Credits/Advances from Banks/Others	26158	23740	140
5. Net Worth	69487	76016	82641
6. i) Net Fixed Assets	67801	64908	65841
ii) Working Capital	42048	61617	39403
iii) Capital Empl.(i+ii)	109849	126525	105244
7. Sales/Operating Income	978683	1027571	1105506
8. i) Total Emoluments (incl. perks)	8296	9778	11010
ii) Of which Bonus	673	715	740
iii) Average Emoluments per person p.a.	0.30	0.34	0.36
9. Inventories	107514	132214	146567
10. Adjusted Gross Profit	22999	22713	25191
11. Adjusted Net Profit	12433	8679	8922
12. Dividends Declared	1726	1726	1726
13. Corporate Tax	3323	6150	7884
% Age of:-			
a) Net Profit to Paid-up Capital	100.9	70.4	72.4
b) Net Profit to Net Worth	17.9	11.4	10.8
c) Gross Profit to Capital Emp.	20.9	18.0	23.9
d) Sales to Capital Emp.	890.9	812.2	1050.4
e) Gross Profit to Sales	2.4	2.2	2.2
f) Equity Loan Ratio	0.42	0.25	0.25

Source : 1. Annual Reports of the Company.

TABLE NO. 10

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BHARAT PETROLEUM CORPORATION LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	2500	2500	2500
2. i) Paid-up Capital	1454	1657	1657
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	7577	9191	10355
3. i) Total Loans	2120	6535	10852
ii) Of which Foreign	NIL	1835	2499
4. Cash Credits/Advances from Banks/Others	10554	17563	23302
5. Net Worth	9031	10848	12012
6. i) Net Fixed Assets	5038	6664	18970
ii) Working Capital	8237	12192	13329
iii) Capital Empl.(i+ii)	13275	18856	32299
7. Sales/Operating Income	172408	187105	212765
8. i) Total Emoluments (incl. perks)	1815	2166	2753
ii) Of which Bonus	147	177	215
iii) Average Emoluments per person p.a.	0.30	0.30	0.30
9. Inventories	13379	16202	16628
10. Adjusted Gross Profit	4089	3138	4140
11. Adjusted Net Profit	1479	1457	1555
12. Dividends Declared	NIL	NIL	232
13. Corporate Tax	1650	350	700
% Age of:-			
a) Net Profit to Paid-up Capital	101.7	87.5	93.8
b) Net Profit to Net Worth	16.4	13.4	12.9
c) Gross Profit to Capital Emp.	30.8	16.6	12.8
d) Sales to Capital Emp.	1298.7	992.3	658.7
e) Gross Profit to Sales	2.4	1.7	2.0
f) Equity Loan Ratio	0.69	0.25	0.15

Source : 1. Annual Reports of the Company.

TABLE NO. 11

FINANCIAL STRUCTURE

NAME OF THE COMPANY : HINDUSTAN PETROLEUM CORPORATION LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	2075	10000	10000
2. i) Paid-up Capital	1520	4020	4020
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	11335	12812	13598
3. i) Total Loans	10043	22390	42405
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	6834	6919	5923
5. Net Worth	12325	16291	17110
6. i) Net Fixed Assets	9348	12001	25311
ii) Working Capital	8084	10637	15392
iii) Capital Empl.(i+ii)	17432	22638	40703
7. Sales/Operating Income	219044	246079	268746
8. i) Total Emoluments (incl. perks)	1627	1887	2161
ii) Of which Bonus	136	143	192
iii) Average Emoluments per person p.a.	0.26	0.27	0.28
9. Inventories	24121	29672	30847
10. Adjusted Gross Profit	5152	3823	5288
11. Adjusted Net Profit	1862	1759	1189
12. Dividends Declared	213	311	402
13. Corporate Tax	831	23	56
% Age of:-			
a) Net Profit to Paid-up Capital	122.5	43.8	29.6
b) Net Profit to Net Worth	15.1	10.8	6.9
c) Gross Profit to Capital Emp.	29.5	16.9	13.0
d) Sales to Capital Emp.	1256.6	1087.0	660.3
e) Gross Profit to Sales	2.3	1.6	2.0
f) Equity Loan Ratio	0.15	0.18	0.09

Source : 1. Annual Reports of the Company.

TABLE NO. 12

FINANCIAL STRUCTURE

NAME OF THE COMPANY : COCHIN REFINERIES LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	1500	1500	1500
2. i) Paid-up Capital	700	700	700
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	1004	1810	1964
3. i) Total Loans	5633	14370	20220
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	2104	1533	12
5. Net Worth	1704	2510	2664
6. i) Net Fixed Assets	1040	985	3381
ii) Working Capital	1985	4682	5864
iii) Capital Empl.(i+ii)	3025	5667	9245
7. Sales/Operating Income	70212	58067	15903
8. i) Total Emoluments (incl. perks)	121	140	183
ii) Of which Bonus	6	7	8
iii) Average Emoluments per person p.a.	0.24	0.22	0.22
9. Inventories	7685	2761	5741
10. Adjusted Gross Profit	1213	1437	909
11. Adjusted Net Profit	701	950	268
12. Dividends Declared	140	140	105
13. Corporate Tax	78	NIL	NIL
% Age of:-			
a) Net Profit to Paid-up Capital	100.1	135.7	38.3
b) Net Profit to Net Worth	41.1	37.9	10.0
c) Gross Profit to Capital Emp.	40.1	25.4	9.8
d) Sales to Capital Emp.	2321.0	1024.6	172.0
e) Gross Profit to Sales	1.7	2.4	5.7
f) Equity Loan Ratio	0.12	0.05	0.03

Source : 1. Annual Reports of the Company.

TABLE NO. 13

FINANCIAL STRUCTURE

NAME OF THE COMPANY : MADRAS REFINERIES LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	1350	13500	13500
2. i) Paid-up Capital	1287	1287	9825
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	1834	2294	3354
3. i) Total Loans	8953	21665	25511
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	NIL	678	2112
5. Net Worth	3116	3578	13176
6. i) Net Fixed Assets	1189	3238	14977
ii) Working Capital	2927	8059	19293
iii) Capital Empl.(i+ii)	4116	11297	34270
7. Sales/Operating Income	71429	62521	88768
8. i) Total Emoluments (incl. perks)	142	171	226
ii) Of which Bonus	14	16	19
iii) Average Emoluments per person p.a.	0.24	0.25	0.25
9. Inventories	5590	9952	13117
10. Adjusted Gross Profit	816	1353	3468
11. Adjusted Net Profit	410	643	2161
12. Dividends Declared	193	193	1102
13. Corporate Tax	199	3	56
% Age of:-			
a) Net Profit to Paid-up Capital	31.9	50.0	22.0
b) Net Profit to Net Worth	13.1	17.9	16.4
c) Gross Profit to Capital Emp.	19.8	11.9	10.1
d) Sales to Capital Emp.	1735.4	553.4	259.0
e) Gross Profit to Sales	1.1	2.1	3.9
f) Equity Loan Ratio	0.14	0.06	0.39

Source : 1. Annual Reports of the Company.

TABLE NO. 14

FINANCIAL STRUCTURE

NAME OF THE COMPANY : IBP CO. LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	300	300	300
2. i) Paid-up Capital	240	240	240
ii) Preference Capital	50	50	50
iii) Reserve & Surpluse	889	1190	1457
3. i) Total Loans	NIL	NIL	28
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	364	180	325
5. Net Worth	1179	1480	1747
6. i) Net Fixed Assets	740	912	1017
ii) Working Capital	93	148	386
iii) Capital Empl.(i+ii)	833	1060	1403
7. Sales/Operating Income	44941	50819	57182
8. i) Total Emoluments (incl. perks)	303	356	426
ii) Of which Bonus	19	19	26
iii) Average Emoluments per person p.a.	0.22	0.23	0.25
9. Inventories	457	600	687
10. Adjusted Gross Profit	559	592	614
11. Adjusted Net Profit	273	346	289
12. Dividends Declared	41	46	46
13. Corporate Tax	238	230	311
% Age of:-			
a) Net Profit to Paid-up Capital	94.1	119.3	99.7
b) Net Profit to Net Worth	23.2	23.4	16.5
c) Gross Profit to Capital Emp.	67.1	55.9	43.8
d) Sales to Capital Emp.	5395.0	4794.2	4075.7
e) Gross Profit to Sales	1.2	1.2	1.1
f) Equity Loan Ratio	NIL	NIL	10.4

Source : 1. Annual Reports of the Company.

TABLE NO. 15

FINANCIAL STRUCTURE

NAME OF THE COMPANY : LUBRIZOL INDIA LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	480	480	480
2. i) Paid-up Capital	480	480	480
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	926	1116	1332
3. i) Total Loans	167	298	506
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	NIL	168	598
5. Net Worth	1406	1596	1812
6. i) Net Fixed Assets	452	603	794
ii) Working Capital	1029	1338	1676
iii) Capital Empl.(i+ii)	1481	1941	2470
7. Sales/Operating Income	5952	7796	9053
8. i) Total Emoluments (incl. perks)	117	152	204
ii) Of which Bonus	5	4	11
iii) Average Emoluments per person p.a.	0.36	0.43	0.51
9. Inventories	1257	1409	1996
10. Adjusted Gross Profit	545	487	564
11. Adjusted Net Profit	263	275	314
12. Dividends Declared	67	86	96
13. Corporate Tax	240	182	183
% Age of:-			
a) Net Profit to Paid-up Capital	54.8	57.3	65.4
b) Net Profit to Net Worth	18.7	17.2	17.3
c) Gross Profit to Capital Emp.	36.8	25.0	22.8
d) Sales to Capital Emp.	401.9	401.6	366.5
e) Gross Profit to Sales	9.2	6.3	6.2
f) Equity Loan Ratio	2.87	1.61	0.95

Source : 1. Annual Reports of the Company.

TABLE NO. 16

FINANCIAL STRUCTURE

NAME OF THE COMPANY : INDIAN OIL BLENDING LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	40	40	40
2. i) Paid-up Capital	40	40	40
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	180	194	223
3. i) Total Loans	NIL	NIL	NIL
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	24	23	23
5. Net Worth	220	234	263
6. i) Net Fixed Assets	169	160	159
ii) Working Capital	73	94	103
iii) Capital Empl.(i+ii)	242	254	262
7. Sales/Operating Income	305	336	408
8. i) Total Emoluments (incl. perks)	153	183	212
ii) Of which Bonus	15	13	14
iii) Average Emoluments per person p.a.	0.30	0.35	0.40
9. Inventories	16	13	14
10. Adjusted Gross Profit	65	38	77
11. Adjusted Net Profit	37	17	32
12. Dividends Declared	4	4	4
13. Corporate Tax	25	21	42
% Age of:-			
a) Net Profit to Paid-up Capital	92.5	42.5	80.0
b) Net Profit to Net Worth	16.8	7.3	12.2
c) Gross Profit to Capital Emp.	26.8	15.0	29.4
d) Sales to Capital Emp.	126.0	132.3	155.7
e) Gross Profit to Sales	21.3	11.3	18.8
f) Equity Loan Ratio	NIL	NIL	NIL

Source : 1. Annual Reports of the Company.

TABLE NO. 17

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BOAGAIGAON REFINERY & PETRO-CHEMICALS LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	10000	10000	20000
2. i) Paid-up Capital	9850	9850	13242
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	814	1066	1345
3. i) Total Loans	9916	14648	16474
ii) Of which Foreign	NIL	192	557
4. Cash Credits/Advances from Banks/Others	661	1098	1633
5. Net Worth	10655	10888	14561
6. i) Net Fixed Assets	7227	7728	7894
ii) Working Capital	1744	2956	4293
iii) Capital Empl.(i+ii)	8971	10684	12187
7. Sales/Operating Income	13242	13399	16300
8. i) Total Emoluments (incl. perks)	232	273	343
ii) Of which Bonus	NIL	NIL	NIL
iii) Average Emoluments per person p.a.	0.24	0.25	0.27
9. Inventories	2619	3521	5081
10. Adjusted Gross Profit	751	470	523
11. Adjusted Net Profit	639	253	281
12. Dividends Declared	NIL	NIL	NIL
13. Corporate Tax	NIL	NIL	NIL
% Age of:-			
a) Net Profit to Equity	6.5	2.6	2.1
b) Net Profit to Net Worth	6.0	2.3	1.9
c) Gross Profit to Capital Emp.	8.4	4.4	4.3
d) Sales to Capital Emp.	147.6	125.4	133.8
e) Gross Profit to Sales	5.7	3.5	3.2
f) Equity Loan Ratio	0.99	0.67	0.80

Source : 1. Annual Reports of the Company.

TABLE NO. 18

CONSOLIDATED FINANCIAL STRUCTURE

NAME OF THE COMPANY : ENGENEERING SERVICES AND OTHER UNITS.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	1450	1450	1450
2. i) Paid-up Capital	840	940	940
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	3190	3990	5081
3. i) Total Loans	2272	2671	3004
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	1265	1279	1591
5. Net Worth	2586	3372	4291
6. i) Net Fixed Assets	1508	2787	3171
ii) Working Capital	3576	3845	4762
iii) Capital Empl.(i+ii)	5084	6632	7933
7. Sales/Operating Income	14958	17184	19540
8. i) Total Emoluments (incl. perks)	3961	4866	4705
ii) Of which Bonus	71	74	105
iii) Average Emoluments per person p.a.	0.23	0.30	0.30
9. Inventories	2805	2996	4227
10. Adjusted Gross Profit	1613	2180	2515
11. Adjusted Net Profit	685	735	763
12. Dividends Declared	34	40	44
13. Corporate Tax	455	843	1103
% Age of:-			
a) Net Profit to Paid-up Capital	81.6	78.2	81.2
b) Net Profit to Net Worth	26.5	21.8	17.8
c) Gross Profit to Capital Emp.	31.7	32.8	31.7
d) Sales to Capital Emp.	294.2	259,1	246.3
e) Gross Profit to Sales	10.8	12.7	12.8
f) Equity Loan Ratio	0.37	0.35	0.31

Source : 1. Annual Reports of the Companies.

TABLE NO. 19

FINANCIAL STRUCTURE

NAME OF THE COMPANY : ENGINEERS INDIA LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	200	200	200
2. i) Paid-up Capital	50	50	50
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	2539	3190	4095
3. i) Total Loans	NIL	1	NIL
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	NIL	NIL	NIL
5. Net Worth	2589	3240	4145
6. i) Net Fixed Assets	538	1673	1818
ii) Working Capital	1391	1392	1878
iii) Capital Empl.(i+ii)	1929	3065	3696
7. Sales/Operating Income	4083	4100	4614
8. i) Total Emoluments (incl. perks)	1298	1438	1658
ii) Of which Bonus	25	25	45
iii) Average Emoluments per person p.a.	0.38	0.40	0.45
9. Inventories	27	29	32
10. Adjusted Gross Profit	965	1349	1594
11. Adjusted Net Profit	575	659	694
12. Dividends Declared	8	8	8
13. Corporate Tax	390	690	900
% Age of:-			
a) Net Profit to Paid-up Capital	1150.0	1318.0	1388.0
b) Net Profit to Net Worth	22.2	20.4	16.7
c) Gross Profit to Capital Emp.	50.0	44.0	43.1
d) Sales to Capital Emp.	211.7	133.8	124.8
e) Gross Profit to Sales	23.6	32.9	34.5
f) Equity Loan Ratio	NIL	50.0	NIL

Source : 1. Annual Reports of the Company.

TABLE NO. 20

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BALMER LAWRIE AND COMPANY LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	300	300	300
2. i) Paid-up Capital	189	189	189
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	577	705	836
3. i) Total Loans	286	361	428
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	1036	1143	1491
5. Net Worth	765	893	1025
6. i) Net Fixed Assets	597	689	771
ii) Working Capital	1345	1447	1957
iii) Capital Empl.(i+ii)	1942	2136	2728
7. Sales/Operating Income	5580	7317	9047
8. i) Total Emoluments (incl. perks)	420	461	507
ii) Of which Bonus	22	23	27
iii) Average Emoluments per person p.a.	0.21	0.23	0.25
9. Inventories	782	864	1596
10. Adjusted Gross Profit	359	526	607
11. Adjusted Net Profit	104	167	190
12. Dividends Declared	26	32	36
13. Corporate Tax	65	122	169
% Age of:-			
a) Net Profit to Paid-up Capital	55.0	88.4	100.5
b) Net Profit to Net Worth	13.6	18.7	18.5
c) Gross Profit to Capital Emp.	18.5	24.6	22.3
d) Sales to Capital Emp.	287.3	342.6	331.6
e) Gross Profit to Sales	6.4	7.2	6.7
f) Equity Loan Ratio	0.66	0.52	0.44

Source : 1. Annual Reports of the Company.

TABLE NO. 21

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BIECCO LAWRIE AND COMPANY LIMITED.

Rs./Lakhs.

I T E M	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	250	250	250
2. i) Paid-up Capital	177	177	177
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	3	3	3
3. i) Total Loans	1090	1325	1641
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	34	113	100
5. Net Worth	-825	-1081	-1387
6. i) Net Fixed Assets	95	101	100
ii) Working Capital	180	243	251
iii) Capital Empl.(i+ii)	275	344	351
7. Sales/Operating Income	605	546	661
8. i) Total Emoluments (incl. perks)	213	235	269
ii) Of which Bonus	9	10	10
iii) Average Emoluments per person p.a.	0.14	0.16	0.19
9. Inventories	263	303	281
10. Adjusted Gross Profit	-15	-73	-79
11. Adjusted Net Profit	-157	-253	-308
12. Dividends Declared	NIL	NIL	NIL
13. Corporate Tax	NIL	NIL	NIL
% Age of:-			
a) Net Profit to Paid-up Capital	Negetive	Negetive	Negetive
b) Net Profit to Net Worth	Negetive	Negetive	Negetive
c) Gross Profit to Capital Emp.	Negetive	Negetive	Negetive
d) Sales to Capital Emp.	220.0	158.7	188.3
e) Gross Profit to Sales	Negetive	Negetive	Negetive
f) Equity Loan Ratio	0.16	0.13	0.11

Source : 1. Annual Reports of the Company.

TABLE NO. 22

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BRIDGE AND ROOF COMPANY (INDIA) LIMITED.

Rs./Lakhs.

ITEM	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)
1. Authorised Capital	700	700	700
2. i) Paid-up Capital	424	524	524
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluse	71	92	147
3. i) Total Loans	896	984	935
ii) Of which Foreign	NIL	NIL	NIL
4. Cash Credits/Advances from Banks/Others	195	23	NIL
5. Net Worth	57	320	508
6. i) Net Fixed Assets	278	324	482
ii) Working Capital	660	763	676
iii) Capital Empl.(i+ii)	938	1087	1158
7. Sales/Operating Income	4690	5221	5218
8. i) Total Emoluments (incl. perks)	2030	2732	2271
ii) Of which Bonus	15	16	23
iii) Average Emoluments per person p.a.	0.18	N.A.	N.A.
9. Inventories	1733	2300	2318
10. Adjusted Gross Profit	304	378	393
11. Adjusted Net Profit	163	162	187
12. Dividends Declared	NIL	NIL	NIL
13. Corporate Tax	NIL	31	34
% Age of:-			
a) Net Profit to Paid-up Capital	38.4	30.9	35.7
b) Net Profit to Net Worth	285.9	50.6	36.8
c) Gross Profit to Capital Emp.	32.4	34.8	33.9
d) Sales to Capital Emp.	500.0	480.3	450.6
e) Gross Profit to Sales	6.5	7.2	7.5
f) Equity Loan Ratio	0.47	0.53	0.56

Note : Annual Reports of the Company.

CAPITAL INVESTMENT OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS AS ON 1-4-1984, 1-4-1985, and 1-4-86.

Rs./Crores

Name of the Undertaking	As on 1-4-1984				As on 1-4-1985				As on 1-4-1986			
	Equity	Loans	Total	Govt. Share	Equity	Loans	Total	Govt. Share	Equity	Loans	Total	Govt. Share
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A.Exploration & Production	395.9	1926.5	2322.4	435.3	395.9	2309.5	2705.4	419.4	395.9	2547.9	2943.8	403.2
1. ONGC	342.9	1881.8	2224.7	365.4	342.9	2270.9	2613.8	355.2	342.9	2515.5	2858.4	344.8
2. HIL	25.0	NIL	25.0	NIL	25.0	NIL	25.0	NIL	25.0	NIL	25.0	NIL
3. OIL	28.0	44.7	72.7	69.9	28.0	38.6	66.6	64.2	28.0	32.4	60.4	58.4
B.Refining and Marketing	208.1	1030.2	1238.3	359.6	293.5	1311.2	1604.7	478.4	328.4	1264.8	1593.2	519.6
4. IOC	123.3	481.0	604.3	196.9	123.3	485.4	608.7	178.8	123.3	378.7	502.0	162.4
5. BPCL	16.6	83.5	100.1	29.7	16.6	139.2	155.8	42.9	27.9	136.5	164.4	58.9
6. HPCL	40.2	148.4	188.6	68.8	40.2	244.0	284.2	88.3	63.8	284.0	347.8	122.7
7. CRL	7.0	97.6	104.6	26.5	7.0	182.2	189.2	38.8	7.0	238.4	245.4	39.6
8. MRL	12.9	216.7	229.6	32.8	98.3	255.1	353.4	124.8	98.3	219.0	317.3	131.5
9. IBP Co.Ltd.	2.9	NIL	2.9	1.6	2.9	0.3	3.2	1.9	2.9	0.3	3.2	1.6
10.Lubrizol	4.8	3.0	7.8	2.9	4.8	5.0	9.8	2.9	4.8	6.4	11.2	2.9
11.IOB	0.4	NIL	0.4	0.4	0.4	NIL	0.4	NIL	0.4	1.5	1.9	NIL
C.Petrochemicals	98.5	156.4	254.9	124.0	132.4	165.0	297.4	146.3	190.8	139.3	330.1	190.8
12.BRPL	98.5	156.4	254.9	124.0	132.4	165.2	297.4	146.3	190.8	139.3	330.1	190.8
D.Engineering Units	9.4	24.4	33.8	27.7	9.4	27.5	36.9	28.2	9.4	26.7	36.1	27.7
13.EIL	0.5	NIL	0.5	0.5	0.5	NIL	0.5	0.5	0.5	NIL	0.5	0.5
14.Balmer Lawrie Ltd.	1.9	3.6	5.5	NIL	1.9	4.3	6.2	0.2	1.9	3.8	5.7	NIL
15.Biecco Lawrie Ltd.	1.8	11.3	13.1	12.8	1.8	13.8	15.6	15.2	1.8	15.2	17.0	16.6
16.Balmer & Roof Co. (India) Ltd.	5.2	9.5	14.7	14.4	5.2	9.4	14.6	12.3	5.2	7.7	12.9	10.6
T O T A L : A+B+C+D	711.9	3137.5	3849.4	946.6 (24.6%)	831.2	3813.2	4644.4	1072.3 (23.0%)	924.5	3978.7	4903.2	1141.3 (23.3%)

NOTE : Figure in brackets indicate the % age share of the Government.

GLOSSARY OF TERMS USED IN THE "ANNUAL REPORT ANALYSIS"

1. Loans : These include both secured and unsecured loans but exclude interest accured, if any, included in the loans.

2. Net Worth : This represents paid-up capital plus free reserves less accumulated losses (deficit) and deferred revenue expenditure remaining unamortised.

3. Capital Employed : This means gross block less accumulated depreciation there-on plus working capital.

4. Working Capital : Means all current assets, loans & advances deposits, investment (other than trade investments) less current liabilities and provisions (excluding cash credit & bank overdrafts and provision for gratuity).

5. Sales : Means Net sales turnover i.e. after excluding trade discounts and products used for internal consumption.

6. Adjusted Gross Profit : Represents excess of Income over expenditure after providing for interest on loans, taxes, appropriation to reserves, charges pertaining to provious years, bad debts, donations, exchange fluetuations, loss on disposal of Assets, Dividends etc.

7. Adjusted Net Profit : Represents the figure arrived at after deducting from the adjusted gross profit interest on loans and taxes but before appropriation to reserves,

8. Dividend Declared : Includes also preference dividend, if any.

APPENDIX

APPENDIX

ABBREVIATIONS

(i) Companies/Organisations

AOC	: Assam Oil Company.
BPCL	: Bharat Petroleum Corporation Limited.
BRPL	: Bongaigaon Refinery & Petrochemicals Limited.
B/Shell/BSM	: Burmah Shell Oil Storage & Distributing Co.Ltd.
BSR	: Burmah Shell Refineries Limited.
Caltex/CIL	: Caltex (India) Limited.
CORIL	: Caltex Oil Refining (India) Limited.
CRL	: Cochin Refineries Limited.
EIL	: Engineers India Limited.
ESSO	: Esso Standard Eastern Inc.
ESRC	: Esso Standard Refining Company of India Limited.
HPCL	: Hindustan Petroleum Corporation Limited.
HIL	: Hydrocarbons India Limited.
IBP Co.Ltd.	: IBP Co. Ltd.
INDROL	: INDROL Lubricants & Specialities Limited.
IIP	: Indian Institute of Petroleum.
IPE	: Institute of Petroleum Exploration.
IOBL	: Indian Oil Blending Limited.
IOC	: Indian Oil Corporation Limited.
LIL	: Lube India Limited.
Lubrizol	: Lubrizol India Limited.
MRL	: Madras Refineries Limited.
POCL	: Petrosil Oil Company Ltd.
OIL	: Oil India Limited.
ONGC	: Oil & Natural Gas Commission.
OPEC	: Organisation of Petroleum Exporting Countries.
TWOC	: Tide Water Oil Company.
PCL	: Petrofils Cooperative Limited.
NOCIL	: National Organic Chemical Industries Limited.
WIODC	: Western India Oil Distributing Company Ltd.

(ii) Petroleum Products

ATF	: Aviation Turbine Fuel.
AVGAS	: Aviation Gasoline/Spirit.
CBFS	: Carbon Black Feed Stock.
HHS	: Hot Heavy Stock.
HSDO	: High Speed Diesel Oil.
JBO	: Jute Batching Oil.
LDO	: Light Diesel Oil.
LSHS	: Low Sulphur Heavy Stock.
LPG	: Liquified Petroleum Gas.
MS/Mogas	: Motor Spirit/Motor Gasoline.
FO	: Furnace Oil.
MTO	: Mineral Turpentine Oil.
Pet-coke	: Petroleum Coke.
SBP-Spirit	: Special Boiling Point Spirit.
SKO	: Superior Kerosene Oil.
TDO	: Tea Drier Oil.

LIGHT DISTILLATES: (including Gases): Gasolines, Naphtha, SBP Spirit, Solvent Oils, Hexane, Benzene, Toluene, L.P.G., Refinery Gas and W.D. Mixture.

MIDDLE DISTILLATES : Kerosene, ATF/Jet-A1, Vaporising Oil, Aromex/ Iomex, HSDO, LDO/MLO and JBO, Mineral Turpentine Oils, Chemisperse & LABFS.

(iii) PREFIXES USED IN METRIC TABLES

Prefix	: Meaning.	
Milli	: One Thousandth	(1/1000=.001).
Centi	: One Hundredth	(1/100=.01).
Deci	: One Tenth	(1/10=.1).
Unit	: One	(1).
Deka	: Ten	(10).
Hecto	: One Hundred	(100).
Kilo	: One Thousand	(1,000).
Mega	: One Million	(1000, 000).

(iv) Others

API	: American Petroleum Institute.
AFRA	: Average Freight Rate Assessment.
CIF	: Cost, Insurance and Freight.
Crores	: 10 million/100 Lakhs.
DWT	: Dead Weight Tonnage.
FOB	: Free on Board.
GP	: General Purpose (16, 500-24, 999 dwt).
HV	: High Viscosity Index.
KL	: Kilometre.
LR I	: Large Range I (45,000-79, 999 dwt).
LR II	: Large Range II (80,000-1, 59,999 dwt).
LV	: Low Viscosity.
LVI	: Medium Range (25,000-49, 999 dwt).
MR	: Metric Ton.
MTPA	: Million Tonnes Per annum.
MV	: Medium Visocosity.
MVI	: Medium Viscosity Index.
R&D	: Research and Development.
ULCC	: Ultra Large Crude Carrier (320,000-549, 999 dwt).
VLCC	: Very Large Crude Carrier (1,60,000dwt and more).
NA	: Not Available.
-	: Nil.
Neg	: Negligible.
Billion	: 10^9 or one thousand Million.
Trillion	: 10^{12} or one million million.
HV	: High Visoosity
P	: Provisional

METRIC UNITS

LINER

10 Millimetres	= 1 Centimetre.
10 Centimetres	= 1 Decimetre.
10 Decimetres	= 1 Metre.
10 Metres	= 1 Decametre.
10 Decametres	= 1 Hectometre.
10 Hectometres	= 1 Kilometre.

AREA

100 Sq. Millimetres	= 1 Sq. Centimetre.
100 Sq. Centimetres	= 1 Sq. Decimetre.
100 Sq. Decimetres	= 1 Sq. Metre.
100 Sq. Metres	= 1 Sq. Decimetre = 1 Acre.
100 Sq. Acres	= 1 Sq. Hectometre.
	= 1 Hectare.
100 Hectares	= 1 Sq. Kilometre.

WEIGHT:

10 Milligrams	= 1 Centigram.
10 Centigrams	= 1 Decigram.
10 Decigrams	= 1 Gram.
10 Grams	= 1 Decagram.
10 Decagrams	= 1 Hectogram.
10 Hectograms	= 1 Kilogram.
100 Kilograms	= 1 Quintal.
1000 Kilograms	= 1 Matric Tonne.

CAPACITY

10 Millilitres	= 1 Centilitre.
10 Centilitres	= 1 Decilitre.
10 Decilitres	= 1 Litre.
10 Litres	= 1 Decalitre.
10 Decalitres	= 1 Hectolitre.
10 Hectolitres	= 1 Kilolitre.

VOLUME

1000 Cubic Millimetres	= 1 Cubic Centimetre.
1000 Cubic Centimetres	= 1 Cubic Decimetre.
1000 Cubic Decimetres	= 1 Cubic Metre.

CONVERSION FACTORS USED IN THE OIL TRADE LINEAR AND SQUARE MEASURES.

LENGTH

1 Inch	= 25.4 Millimetres (mm). = 0.0254 Metre.
1 Foot	= 12 Inches. = 0.333333 Yard. = 0.3048 Metre (m).
1 Yard	= 36 Inches. = 3 Feet. = 0.9144 Metre (m).
1 Metre	= 39.3701 Inches. = 3.28084 Feet. = 1.09361 Yards. = 0.001 Kilometre (km).
1 Kilometre	= 1000 Metre (m). = 0.621371 Mile.
1 Mile	= 1760 Yards. = 1.60934 Kilometres (km).
1 International Nautical Mile	= 6076.12 Feet. = 1.852 Kilometres (km) = 1.5152 statute mile.

AREA

1 Square Inch	= 645.16 Square Millimetres (mm2).
1 Square Foot	= 0.0929030 Square Metre (m2).
1 Square Yard	= 9 square Feet. = 0.836127 Square Metre (m2).
1 Square Metre	= 10,7639 Square Feet. = 1.19599 Square Yards
1 Acre	= 4840 Square Yards. = 4046.86 Square Metres (m2). = 0.404686 Hectares.
1 Hectare	= 10,000 Square Metres (m2). = 2.47105 Acres. = 0.01 Square Kilometre (km2).
1 Square Kilometre	= 100 Hectares. = 0.386102 Square Mile.
1 Square Mile	= 640 Acres. = 258.999 Hectares. = 2.58999 Square Kilometres (km2).

MASS. WEIGHTS

1 Ounce	= 28.3495 Grams (g).
1 Pound	= 0.453592 Kilogram (kg.).
	= 0.00892857 Hundred Weight.
1 Kilogram	= 2.20462 Pounds.
	= 0.01 Quintal.
1 Hundred Weight (cwt)	= 112 Pounds.
	= 50.8023 Kilograms (kg.).
1 American (Short) Ton	= 2000 Pounds.
	= 0.907185 Tonne.
	= 0.892857 Long Ton.
1 Tonne (Metric Ton)	= 2204.62 Pounds.
	= 1000 Kilograms (kg.).
	= 1.10231 Short Tons.
	= 0.984207 Long Ton.
1 Imperial (Long) Ton	= 2240 Pounds.
	= 1.12 Short Tons.
	= 1.01605 Tonnes.

ENERGY AND POWER

1 International Table (IT) Caloric	= 4.1868 Joules (J).
115°C caloric	= 4.1855 Joules (J).
1 Thermochemical Caloric	= 4.184 Joules (J).
1 Kilo Cloric (IT)	= 1000 Calories.
	= 3.96832 British Thermal Units.
	= 1.163 Watt Hours.
	= 1 Thermie.
1 Kilowatt Hour	= 3412.14 British Thermal Units.
	= 859.845 Kilocalories.
	= 3.6 Megajoules (MJ).
	1.34102 Horse Power Hours.
1 Therm	= 100,000 British Thermal Units. (BTU).
	= 105.506 Megajoules (MJ).
	= 29.3071 Kilowatt Hours.
	= 25.1996 Thermies.
	= 25200 Kilocalories.
1 Metric Horsepower (Pferdestaerke or Cheval Vapeur)	= 735.499 Watts (W).
	= 542.476 Foot Pounds Force/Second.
	= 0.986320 Imperial Horse Power.
1 Imperial Horsepower	= 745.700 Watts (W).
	= 550 Foot Pounds Force/Second.
	= 1.01387 Metric Horse Power.
1 Kilowatt	= 737.562 Foot Pounds Force/Second.
	= 1.35962 Metric Horsepower.
	= 1.34102 Imperial Horsepower.
	= 1000 Watts.
1 BTU	= 0.252 Kilocalories.
	= 1.055 Kilojoules.

CUBIC MEASURES

VOLUME

1 Cubic Inch	= 16.3871 Cubic Centimetres (cm3).
1 Pint	= 0.568261 Cubic Decimetres (dm3) or Liters.
1 Litre	= 61.024 Cubic Inches. = 1.75975 Pints. = 1 Cubic Decimetre (dm3). = 0.264172 American Gallons. = 0.219963 Imperial Gallons. = 0.0353147 Cubic Foot.
1 Hectolitre	= 100 Cubic Decimetres (dm3) or. = 100 Litres.
1 American Gallon	= 231 Cubic Inches. = 3.78541 Cubic Decimetres or Litres. = 0.832674 Imperial Gallon. = 0.133681 Cubic Foot. = 0.0238095 American Barrel. = 0.00378541 Cubic Metre (m3).
1 Imperial Gallon	= 277.420 Cubic Inches. = 4.54609 Cubic Decimetres (dm3) or Litres. = 1.20095 American Gallon. = 0.160544 Cubic Foot. = 0.028594 American Barrel. = 0.00454609 Cubic Metre (m3).
1 Cubic Foot	= 28.3168 Cubic Decimetres (dm3) or Litres. = 7.48052 American Gallons. = 6.22883 Imperial Gallons. = 0.17811 American Barrel. = 0.0283168 Cubic Metre (m3).
1 American Barrel	= 9702 Cubic Inches. = 158.987 Cubic Decimetres (dm3) or Litres. = 42 American Gallons. = 34.9726 Imperial Gallons. = 5.6146 Cubic Feet. = 0.158987 Cubic Metre (m3)
1 Cubic Metre	= 1000 Litres. = 264.172 Americal Gallons. = 219.969 Imperial Gallons. = 35.3147 Cubic Feet. = 6.28981 American Barrels.
1 Kilolitre	= 1000 Cubic Decimetres (dm3) or Litres. = 6.28981 American Barrels.
1 Gross Ton (Shipping)	= 2.83168 Cubic Metres or 100 cubic. Feet of Permanently Enclosed Space.
1 Ton of Liquified Methane	= Approx. 16 Barrels. = Approx. 1400 Cubic Metres of Natural Gas Depending Upon Methane Content.

PRODUCT CONVERSION FACTOR

(Conversion Factor From Volume To Tonnes At Natural Temp.)

PRODUCTS	Litres to Matric Tonnes	Tonnes per K.L.	American Barrels to Matric tonnes
1	2	3	4
Aviation Spirit 100/130	1421	0.7034	8.94
Aviation Spirit 114/145	1449	0.6901	9.11
Aviation Spirit 73 ON	1432	0.6983	9.01
Motor Spirit 79 ON	1427	0.7008	8.98
Motor Spirit 80 ON	1427	0.7008	8.98
Motor Spirit 93 ON	1386	0.7215	8.72
Motor Spirit 95 ON	1359	0.7358	8.55
Motor Spirit 83 ON	1411	0.7087	8.88
JP-4	1384	0.7225	8.71
JP-5	1273	0.7855	8.01
Aviation Turbine	1288	0.7764	8.10
Naphtha	1467	0.6817	9.23
Power Alcohol	1286	0.7776	8.09
Benzol	1154	0.8666	7.26
SBP Spirit/Hexane	1457	0.6863	9.16
Mineral Turpentine (Laws 140/205)	1302	0.7680	8.19
Liquified Petroleum Gas	1785	0.5602	11.23
Superior Kerosene	1285	0.7782	8.08
Inferior Kerosene	1265	0.7905	7.96
Power Kerosene (Vap. Oil)	1251	0.7994	7.87
High Speed Diesel	1210	0.8263	7.61
Light Diesel Oil	1172	0.8532	7.37
Malarial Oil	1172	0.8532	7.37
Special Larvicides	1175	0.8511	7.39
Furnace Oil	1071	0.9337	6.74
Tea Drier Oil	1071	0.9337	6.74
Hot Heavy Stock/LSHS	1017	0.9833	6.40
Refinery Gas/Ref. Boiler Fuel	1071	0.9337	6.74
Lubricants/Greases	1114	0.8977	7.01
Jute Batching Oil/ Wash Oils	1167	0.8569	7.34
Bitumen	1002	0.9980	6.30
SBP/Alcohol Mixture	1414	0.7072	8.89
Methanol Mixture	1106	0.9042	6.96
Carbon Black Feed Stock	1134	0.8818	7.13
Carburetter Testing Fluid	1388	0.7205	8.73
Benzene	1131	0.8812	7.05
Toluene	1148	0.8711	7.19
Demineralised Water	1002	0.9930	6.30
S. Glass Kleanzit	1003	0.9970	6.31
Miscellaneous	1114	0.8977	7.01
Wax/P.Cock/Chemicals	1114	0.8977	7.01
Aromex	1221	0.8190	7.68

VOLUME PER METRIC TON OF PETROLEUM PRODUCTS

Porducts	Kilolitre	Imperial Gallon	U.S. Gallon	Barrel
1	2	3	4	5
Liquified Pet. Gas.	1.8519	407.365	489.213	11.648
Aviation Spirit	1.3699	301.332	361.873	8.613
Natural Gasoline	1.3514	297.265	356.990	8.496
Motor Spirit	1.3514	297.265	356.990	8.496
Kerosene	1.2346	271.569	326.137	7.764
Jet Fuel	1.2346	271.569	326.137	7.764
Distillate Fuel Oil	1.1494	252.415	293.522	6.988
Lubricating Oil	1.1111	252.845	303.647	7.231
Fuel Oil N.O.S.	1.0939	241.727	290.301	6.911
Residuel Fuel Oils	1.0526	231.551	278.071	6.623
Asphalt and Bitumen	0.9615	211.515	254.013	6.050
Crude Oil	1.1856	260.910	313.340	7.441

CONVERSION FACTORS FOR DUTY REDUCTION FROM 15°c TO 29.5°c

Product	Conversion Factor
1. Aviation Spirit 100/130	0.9827
2. Aviation Spirit 114/145	0.9820
3. Aviation Spirit 73 Clear	0.9824
4. Aviation Turbine Fuel	0.9862
5. Motor Spirit 83	0.9830
6. Motor Spirit 93	0.9836
7. H.S.D.O.	0.9879
8. Kerosene	0.9864
9. Light Diesel Oil	0.9877
10. Furance Oil	0.9899
11. Special Boiling Point Spirit 55/115	0.9820
12. Special Boiling Point Spirit 64/69	0.9806
13. Solvent 1425	0.9820
14. Hexane	0.9806

PETROLEUM SPECIFIC GRAVITIES.

Degrees A.P.I.	Specific Gravity	Barrels per tonne*	Long ton*
25	0.9042	6.98	7.09
26	0.8984	7.02	7.13
27	0.8927	7.06	7.18
28	0.8871	7.10	7.22
29	0.8816	7.15	7.27
30	0.8762	7.19	7.31
31	0.8708	7.24	7.36
32	0.8654	7.28	7.40
33	0.8602	7.33	7.45
34	0.8550	7.37	7.49
35	0.8499	7.42	7.54
36	0.8448	7.46	7.58
37	0.8398	7.51	7.63
38	0.8348	7.55	7.67
39	0.8299	7.60	7.72
40	0.8251	7.64	7.76
41	0.8203	7.69	7.81
42	0.8156	7.73	7.85

*Approximate figures at 15.6 degree C or 60 degree F.

PRODUCT SPECIFIC GRAVITY RANGES

P R O D U C T S	Specific Gravity	Barrels per tonne
Crude Oils	0.80-0.97	8.0-6.6
Aviation gasolines	0.70-0.78	9.1-8.2
Motor gasolines	0.71-0.79	9.0-8.1
Kerosenes	0.78-0.84	8.2-7.6
Gas Oils	0.82-0.90	7.8-7.1
Diesel Oils	0.82-0.92	7.8-6.9
Lubricating Oils	0.85-0.95	7.5-6.7
Fuel Oils	0.92-0.99	6.9-6.5
Asphaltic bitumens	1.00-1.10	6.4-5.8

CRUDE OIL CONVERSIONS@

To Conver these into these	Metric tons	Barrels	Kilo litres	1,000 Imp.Gallon	1,000 U.S.Gallon
Metric Tons	1	7.33	1.16	0.256	0.308
Barrels	0.136	1	0.159	0.035	0.042
Kilolitres	0.863	6.29	1	0.220	0.264
1,000 Imp. Gallons	3.91	28.6	4.55	1	1.201
1,000 U.S. Gallons	3.25	23.8	3.79	0.833	1

@ = Based on World Average gravity (Excluding Natural Gas liquids)

TO CONVERT ONE METRIC TONNE OF PETROLEUM PRODUCTS TO ONE TONNE OF OIL EQIVALENT MULTIPLY BY

PRODUCT	MULTIPLIERS
L.P.G.	1.130
Naphtha	1.075
Aviation gasoline	1.070
Motor gasoline	1.070
Jet fuel	1.065
Kerosene	1.045
Gas/diesel	1.035
Residuel Fuel Oils	0.985
Others	0.960

Average International Calorific Value of Different Fuels

1.	Kcals/Kg. Mcals/Tonne 2.	BTUS/Kg. 3.
A. Oil Equivalence :		
Average Crude Oil/NGLS(a)	10,300	40,870
United Nations	10,175	40,375
B. Oil Products:		
NGL	12,135	48,150
Motor Gasoline	11,135	44,190
Kerosene	10,638	42,210
Jet Fuel	11,790	46,790
Gas Oil	10,790	42,820
Fuel Oil	10,440	41,430
C. Coal Equivalence:		
Average Hard Coal(b)	7,000	27,775
D. I N D I A:		
Hard Coal	5,000	19,840
Lignite-Brown Coal	2,310	9,166
Firewood @	4,750	18,848
Charcoal @	6,900	27,379
		Kcals/Cu.metre
E. Natural Gas-Production:(Average)		8,000-9,480
India		9,209
F. Electricity:		
Output Basis(c)		860
Fuel Input basis(d)		2,500-2,700

(a) Represent average global factor for crude oil/NGL production. For a specific crude oil relevant convertion factor may have to be used.

(b) Factor used by United Nations to represent average calorific value of hard coals for purposes of standardising coal production to hard coal equivalent base.

(c) Calorific value of 1 kwh of electricity.

(d) Represents Kcals of hydro-carbon energies required to produce 1 kwh of electricity.

@ = As per Report of Fuel Policy Committee 1974.

Conversion Factor: 1 Kcal = 4.19 Kjoules.

Coefficients Used To Convert From Original Units into Standard Coal Equivalents.

Products	Hard Coal	Lignite Brown Coal	Fuel Wood
1	2	3	4
A. PRIMAY SOLIDS			
1. Standard Factor	1.000	0.385	0.333
2. India	0.714	0.330	
B. OTHERS		Hydrocarbons	
1. Petroleum Crude		1.454	
2. Natural Gas Liquids (wf.Av.)		1.542	
3. Gasolines		1.500	
4. Kerosene & Jet fuel		1.474	
5. Gas-Diesel Oil		1.450	
6. Residual Fuel Oil		1.416	
7. Liquefied Petroleum Gases		1.554	
8. Natural Gasoline		1.532	
9. Condensate		1.512	
10. Other Natural Gas Liquids		1.512	
11. Natural Gas (in Terajouls)*		34.121	
12. Other Gases (" " ")*		34.121	
13. Hydro, Nuclear and Geothermal Electricity (in 1,000 kwh)		0.123	

* = The average calorific value of gas is measured in Kcal/m3 (st.) i.e. in Kcal per cubic metre of gas under standard conditions of 15 15°c,013.25 mbar, dry.

COAL REPLACEMENT AND EQUIVALENTS OF DIFFERENT FUELS

Fuels	Original Unit	Unit coal Equivalent in Million Tonnes (mtce)	Coal Replacement in Million Tonnes (mtcr)
1	2	3	4
Coal (coking 6640 Kcal/kg., Non-coking coal used in steam generation (5000 Kcal/Kg.)	1mt	1.0	1.0
Hard Coke	1mt	1.3	1.3
Soft Coke	1mt	1.5	1.3
Firewood (4750 Kcal/Kg.)	1mt	0.95	0.95
Char Coal (6900 Kcal/Kg.)	1mt	1.0	1.0
	2. OIL PRODUCTS : 10,000 Kcal/Kg.		
Black Products (i.e. Fuel Oil; F.O.; Refinery Fuel, LSHS, HHS).	1mt	2.0	2.0
Kerosene & LPG	1mt	2.0	8.0
HSDO & LDO	1mt	2.0	9.0
Motor Spirit & Jet Fuel	1mt	2.0	7.5
Natural Gas (9000 Kcal/Kg.)	10^9 x m3	1.8	3.6
Electricity	10^9 kwh	1.0	1.0

m = Million
mt = Million Tonnes.
Source = Fuel Policy Committee - 1974

Mtce = Million Tonnes of Coal Equivalent.

Mtcr = Million Tonness of Coal Replacement.

Approximate Calorific Equivalents
(Oil = 10,000 K Cal/Kg.)

Items	Million Tonnes of Oil equals
1. Heat Units	= 40 millon BTU = 397 millon therms = 10,000 teracalories
2. Solid Fuels	= 1.5 million tonnes of Coal = 3.0 million tonnes of lignite
3. Natural Gas (1 cub. ft. =1000 BTU)	= (1 Cub metre = 9000 K cal). = 1.111 thousand million cub metres = 39.2 thousand million cub. feet = 107 million cubic feet/day of a year
4. Electricity (1 Kwh = 3412 BTU) (1 Kwh - 860 Kcal)	= 12 thousand million KWH

Heat Units and Others Expressed in Terms of Million Tonnes of Oil

Items	Million tonnes of oil equals
1. Heat Units	
10 million million BTU	0.25
100 million therms	0.25
10,000 teraclaories	1.00
2. Solid Fuels	
1 million tonnes of coal	0.67
1 million tonnes of lignite approximatees to	0.33
3. Natural Gas	
1 thousand million cub. metres (BCM)	0.90
4. Town Gas	
1 thousand million cub. metres (BCM)	0.42
5. Electricity	
12 thousand million KWH	0.86

One million tonnes of oil produces about 4000 million units (KWH) of electricity in a modern power station.

Source : BP Statistical Review of World Energy.

EXCHANGE RATES : 1946-1985

(Rs. per U.S. Dollar)

Year	Calender Year					Financial Year	
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Average for the year	Year	Average for the year
1	2	3	4	5	6	7	8
1946	n.a.	n.a.	n.a.	3.30852	3.30952	1946-47	n.a.
1947	3.30852	3.30852	3.30852	3.30852	3.30852	1947-48	3.30852
1948	3.30852	3.30852	3.30852	3.30852	3.30852	1948-49	3.30852
1949	3.30852	3.30852	3.49275	4.76190	3.71792	1949-50	4.08127
1950	4.76190	4.76190	4.76190	4.76190	4.76190	1950-51	4.76190
1951	4.76190	4.76190	4.76190	4.76190	4.76190	1951-52	4.76190
1952	4.76190	4.76190	4.76190	4.76190	4.76190	1952-53	4.76190
1953	4.76190	4.76190	4.76190	4.76190	4.76190	1953-54	4.76190
1954	4.76190	4.76190	4.76190	4.76190	4.76190	1954-55	4.76190
1955	4.76190	4.76190	4.76190	4.76190	4.76190	1955-56	4.76190
1956	4.76190	4.76190	4.76190	4.76190	4.76190	1956-57	4.76190
1957	4.76190	4.76190	4.76190	4.76190	4.76190	1957-58	4.76190
1958	4.76190	4.76190	4.76190	4.76190	4.76190	1958-59	4.76190
1959	4.76190	4.76190	4.76190	4.76190	4.76190	1059-60	4.76190
1960	4.76190	4.76190	4.76190	4.76190	4.76190	1960-61	4.76190
1961	4.76190	4.76190	4.76190	4.76190	4.76190	1961-62	4.76190
1962	4.76190	4.76190	4.76190	4.76190	4.76190	1962-63	4.76190
1963	4.76190	4.76190	4.76190	4.76190	4.76190	1963-64	4.76190
1964	4.76190	4.76190	4.76190	4.76190	4.76190	1964-65	4.76190
1965	4.76190	4.76190	4.76190	4.76190	4.76190	1965-66	4.76190
1966	4.76190	5.51413	7.50000	7.50000	6.31901	1966-67	7.00353
1967	7.50000	7.50000	7.50000	7.50000	7.50000	1967-68	7.50000
1968	7.50000	7.50000	7.50000	7.50000	7.50000	1968-69	7.50000
1969	7.50000	7.50000	7.50000	7.50000	7.50000	1969-70	7.50000
1970	7.50000	7.50000	7.50000	7.50000	7.50000	1970-71	7.50000

EXCHANGE RATES : 1945 -1985

(Rs. Per U.S. Dollar)

Year	Calendar Year					Financial Year	
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Average for the year	Year	Average for the year
1	2	3	4	5	6	7	8
1971	7.500	7.500	7.500	7.500	7.500	1971-72	7.44950
1972	7.298	7.297	7.759	8.023	7.594	1972-73	7.73025
1973	7.842	7.499	7.651	7.976	7.742	1973-74	7.86275
1974	8.325	7.912	8.073	8.096	8.102	1974-75	7.97550
1975	7.821	8.053	8.716	8.913	8.376	1975-76	8.65325
1976	8.931	9.063	8.967	8.881	8.960	1976-77	8.93850
1977	8.843	8.814	8.733	8.565	8.739	1977-78	8.56250
1978	8.138	8.465	8.051	8.118	8.193	1978-79	8.20625
1979	8.191	8.176	7.998	8.138	8.126	1979-80	8.07625
1980	7.993	7.921	7.747	7.791	7.863	1980-81	7.89278
1981	8.112	8.410	8.984	9.128	8.659	1981-82	7.92925
1982	9.195	9.354	9.570	9.702	9.445	1982-83	9.62850
1983	9.888	10.008	10.148	10.352	10.099	1983-84	10.31225
1984	10.741	10.972	11.579	12.158	11.3625	1984-85	11.88675
1985	12.838	12.498	12.048	12.091	12.36875	1985-86	12.23725
1986	12.312						

Notes : (1) A new value of the Indian Re.of 7.50 per U.S.Dollar was agreed upon with the Fund effective June 6, 1966. Previously the year value was 4.7619 rupees per U.S.Dollar from Sepetember 22, 1949 to June 5,1966 and 3.30852 rupees per U.S. Dollar from December 18, 1946 to September 21, 1949.

(2) Exchange rates for the years 1970 and 1971 are based on 'Trade Conversion Factors'.

(3) Exchange rates for the year 1972 onwards are based on Par rates/market rates.

e = estimated

Source: International Financial Statistics.