INDIAN PETROLEUM & NATURAL GAS STATISTICS

1995-96 and 1996-97

MINISTRY OF PETROLEUM & NATURAL GAS
GOVERNMENT OF INDIA
NEW DELHI

GOVERNMENT OF INDIA

MINISTRY OF PETROLEUM AND NATURAL GAS

FOREWORD

The Ministry of Petroleum & Natural Gas has, since 1967 authored and published the annual bulletin "Indian Petroleum & Natural Gas Statistics". The publication disseminates comprehensive information that appertains to the Petroleum Sector. The bulletin for 1995-96 was not published. This publication, therefore, presents data for 1995-96 and 1996-97, assorted with reference to the calendar year as well as the Indian financial year in step with the requirements of different users. The operating results and the structure of Oil Public Sector Undertakings of this Ministry are also briefly set out. This compilation is the meritorious effort of the Economics & Statistics Division of the Ministry.

Suggestions to improve the quality of presentation await grateful acknowledgement.

(T.S. Vijayaraghavan)
Secretary to the Government of India

Shastri Bhawan
New Delhi-110001.
August 1998

GOVERNMENT OF INDIA

MINISTRY OF PETROLEUM AND NATURAL GAS

ECONOMICS AND STATISTICS DIVISION

PREFACE

The Economics & Statistics Division of the Ministry of Petroleum and Natural Gas has been bringing out a publication "Indian Petroleum & Natural Gas Statistics" since 1967. The publication has been well received over the years. This Ministry updates the information and endeavours to improve the contents periodically so that it is a comprehensive document of current petroleum statistics and the associated aspects of the national economy.

The information has been compiled with input from various Ministries and Departments of the Government of India for which we are beholden to them. Companies in the Hydrocarbon Sector in association with Oil Coordination Committee have been involved in producing this compilation. Their support has been profound. The effort put in by the officials of the Economics & Statistics Division, especially by Shri T.A. Basil, Assistant Director, Shri Khursheed Alam, Research Officer and Senior Investigators, Shri D.C. Garg and Dr. P.G.S. Rao, Ms. Kanwaljit Kaur, Junior Investigator and Shri Pawan Singh Rajawat, Computor merit commendation.

Suggestions for improvement are welcome.

Bashal

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Joint Secretary to the Government of India

Shastri Bhawan
New Delhi - 110 001
August 1998

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INDIAN ECONOMY—SELECTED INDICATORS

Indicator	Unit Base	1980-81	1985-86	1990-91	1994-95	1995-96	1996-97
1. Geographical Area	M.Sq.Km.	3.29	3.29	3.29	3.29	3.29	3.29
2. Population	Million	673	751	835	900	916	936
3. Gross National Product at factor cost:							
(i) At current prices	Rs. Crores	122772	232370	470269	843294	967763 E	..
(ii) at 1980-81 prices	"	122772	155365	208481	249903	267330	..
4. Net National Product at factor cost:							
(i) At current prices	Rs. Crores	110685	206133	418074	748652	857570	..
(ii) At 1980-81 prices	"	110685	139025	186446	221406	236738	..
5. Per Capita Net National Product:							
(i) At current prices	Rupees	1630	2730	4983	8262	9321	..
(ii) At 1980-81 prices	"	1630	1841	2222	2449	2573	..
6. Foreign Exchange Reserves							
(i) Gold+	Rs. Crores	225.6	274.3	6828.3	13751.8	15658.5	15256.4 D
(ii) SDR	No. of SDRs	490.5	115.1	75.9	4.6	56.9	85.1 D
(iii) Foreign Exchange	Rs. Crores	4822	7384	4388	66006	58466	70987 D
7. Foreign Trade:							
(i) Import	Rs. Crores	12549	19658	43196	89971	122678	97111 D
(ii) Export	"	6711	10895	32553	82674	106353	85623 D
(iii) Balance of Trade	"	-5838	-8763	-10645	-7297	-16325	-11488 D
8. Index of Production:							
(i) Agricultural	@	102.1	119.5	148.4	165.0	164.3	..
(ii) Industrial	1980-81=100	100.0	142.1	212.6	253.7	283.3	..
9. Wholesale Price Index:	1981-82=100		125.4	182.7	274.7	295.8	322.2 N
10. Consumer Price Index:							
(i) Industrial Workers	1982=100		126	193	279	313	338 A
(ii) Agricultural Labourers	1960-61=100	395	546	803	1204	234**	251 A
(iii) Urban non-manual employees	1984-85=100		107	161	232	258 A	.
11. Employment: @@							
(i) Public Sector	Million	15.48	17.68	19.06	19.47	..	..
(ii) Private Sector	"	7.40	7.37	7.66	8.06	..	..
Total	"						
No. of persons on live register of employment echange	Million	16.20	27.03	34.89	36.64	36.90	37.62 N
12. Energy Generation (Gross):							
Coal	Mn. Tonnes	113.91	154.20	211.73	253.80	279.13	285.67
Lignite	"	5.11	8.05	13.77	19.34	22.14	25.57
Natural Gas	Mn. Cub. Mtr.	2358	8134	17998	19381	22308	22745
Crude Oil	Mn Tonnes	10.51	30.17	33.02	32.23	35.17	33.80
Petroleum Products	"	25.35	42.37	51.27	57.40	58.32	62.50
13. Electricity:							
(i) Utilities							
Hydel	B.KWH	46.5	51.0	71.7	82.5	72.5	68.6
Thermal	"	61.3	114.4	186.5	262.9	299.6	316.9
Nuclear	"	3.0	5.0	6.1	5.6	8.0	9.0
Total	"	110.8	170.4	264.3	351.0	380.1	394.5
(ii) Non-Utilities	"	8.4	13.0	25.1	33.5	35.1	37.6
GRAND TOTAL	"	119.3	183.4	289.4	384.5	415.2	432.1

Source : (i) Economic Survey 1996-97 (ii) Monthly Abstract of Statistics - Nov.'96 * : Provisional.

@ : Triennium ending 1981-82. .. : Not Available @@ : As on 31st March.

* : Gold is valued at Rs. 84.39 per 10 gms from May 1966 upto Sept. 1990 and closer to international market prices w.e.f. Oct. 11, 1990.

D : At the end of Dec.'96. N : At the end of Nov. '96. M : March '97 E : Quick estimates.

A : Average on the basis of monthly figures.

**: The new series of CPI for agricultural labourers with 1986-87 base was introduced w.e.f. Nov. '95.

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GROWTH OF INDIAN PETROLEUM INDUSTRY AT A GLANCE

Item	Unit	1980-81	1985-86	1990-91	1994-95	1995-96	1996-97
1. Reserves @							
(Balance Recoverable)							
(i) Crude Oil	Mn. Tonnes	366	500	139	765	732	727
(ii) Natural Gas	Bn. Cub. Mtr.	352	479	686	707	660	640
2. Consumption							
(i) Crude Oil	Mn. Tonnes	25.84	42.91	51.77	56.53	58.74	62.82
(In terms of refinery crude T' put)							
(ii) Petroleum Products(excl. RBF)	"	30.90	40.87	55.04	67.37	74.67	79.16
3. Production:							
(i) Crude Oil		10.5	130.17	33.02	32.24	35.17	32.90
(ii) Petroleum Products	"	24.12	39.88	48.56	52.93	55.06	59.01
4. Imports & Exports							
(i) Gross Imports:	"						
(a) Qty: Crude Oil		16.25	15.15	20.70	27.35	27.34	33.91
Pol. Products	"	7.29	3.86	8.66	13.95	20.34	20.26
Total (a) by IOC	"	23.54	19.01	29.36	41.30	47.68	54.17
(b) Value: Crude Oil	Rs. Crores	3349	3687	6118	10316	11517	16538
Pol. Products	"	1917	1274	4660	7522	12578	15634
Total (b) by IOC	"	5266	4961	10778	17838	24095	34172
POL imports as per DGCI &S					18613	25174	35737
(ii) Exports: @@							
(a) Qty: Crude Oil	Mn. Tonnes	-	0.53	-	-	-	-
Pol. Products	"	0.04	1.96	2.65	3.25	3.44	3.16
Total (a)		0.04	2.49	2.65	3.25	3.44	3.16
(b) Value: Crude Oil	Rs. Crores	-	135	-	-	-	-
Pol. Products	"	8	645	1004	1587	1832	2080
Total (b)	"	8	645	1004	1587	1832	2080
(iii) Net Imports:							
(a) Qty: Crude Oil	Mn. Tonnes	16.25	14.62	20.70	27.35	27.34	33.91
Pol. Products	"	7.25	1.90	6.01	10.70	16.90	17.10
Total (a) by IOC	"	23.50	16.52	26.71	38.05	44.24	51.01
(b) Value: Crude Oil	Rs. Crores	3349	3552	6118	10316	11817	16538
Pol. Products	"	1909	764	3656	5834	10746	13554
Total (b) by IOC	"	5258	4316	9774	16150	22263	32092
Pol Imports as per DGCI &S		—	—	—	17086	23342	33657
(iv) Unit Value of Crude							
Oil Imports (gross)	Rs./MT.	2061	2435	2966	3772	4212	5467
5. India's Total Exports	Rs. Crores	6711	10895	32553	82673	106383	117525
6. Pol. Imports as percentage of India's total exports							
(i) Gross Imports	%	78.5	45.5	33.1	22.5	23.7	30.4
(ii) Net Imports	%	78.3	39.6	30.0	20.8	21.9	28.6
7. Contribution of oil sector to Centre/State Resources							
(i) Royalty from crude oil	Rs. Crores	41	379	2028	1561	1837	1550 P
(ii) Royalty from gas	"	3	22	138	224$	271$	330 P
(iii) Oil Development Cess		60	866	2782	2646$	2777$	2650 P
(iv) Excise & Custom duties	"	1570	3768	9179	12905	15612	20160 P
(v) Sales Tax	"	628	1564	3653	7386	8472	9900 P
(vi) Dividend	"	44	82	189	418	686	700 P
(vii) Corporate Tax/others	"	76	740	646	891	1653 E	1600 P
8. Natural Gas:							
(i) Gross Production	Mn. Cu. Mtrs.	2358	8134	17998	19381	22306	22745
(ii) Utilisation	"	1522	4950	12766	17339	20816	21261

@ : As on 1st Jan. of first year.
@@ : Includes supplies of Pol. products to Nepal.
$: Excludes royalty & cess paid/payable by private/JVCs.

E : Estimated.
* : Provisional.
P : Projected.

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GROWTH OF INDIAN PETROLEUM INDUSTRY AT A GLANCE

Item	Unit	1980-81	1985-86	1990-91	1994-95	1995-96	1996-97
1. Reserves @							
(Balance Recoverable)							
(i) Crude Oil	Mn. Tonnes	366	500	139	765	732	727
(ii) Natural Gas	Bn. Cub. Mtr.	352	479	686	707	660	640
2. Consumption							
(i) Crude Oil	Mn. Tonnes	25.84	42.91	51.77	56.53	58.74	62.82
(in terms of refinery crude T' put)							
(ii) Petroleum Products(excl. RBF)	"	30.90	40.87	55.04	67.37	74.67	79.16
3. Production:							
(i) Crude Oil	"	10.5	130.17	33.02	32.24	35.17	32.90
(ii) Petroleum Products	"	24.12	39.88	48.56	52.93	55.06	59.01
4. Imports & Exports							
(i) Gross Imports:	"						
(a) Qty: Crude Oil		16.25	15.15	20.70	27.35	27.34	33.91
Pol. Products	"	7.29	3.86	8.66	13.95	20.34	20.26
Total (a) by IOC	"	23.54	19.01	29.36	41.30	47.68	54.17
(b) Value: Crude Oil	Rs. Crores	3349	3687	6118	10316	11517	16538
Pol. Products	"	1917	1274	4660	7522	12578	15634
Total (b) by IOC	"	5266	4961	10778	17838	24095	34172
POL imports as per DGCI &S					18613	25174	35737
(ii) Exports: @@							
(a) Qty: Crude Oil	Mn. Tonnes	-	0.53	-	-	-	-
Pol. Products	"	0.04	1.96	2.65	3.25	3.44	3.16
Total (a)		0.04	2.49	2.65	3.25	3.44	3.16
(b) Value: Crude Oil	Rs. Crores	-	135	-	-	-	-
Pol. Products	"	8	645	1004	1587	1832	2080
Total (b)	"	8	645	1004	1587	1832	2080
(iii) Net Imports:							
(a) Qty: Crude Oil	Mn. Tonnes	16.25	14.62	20.70	27.35	27.34	33.91
Pol. Products	"	7.25	1.90	6.01	10.70	16.90	17.10
Total (a) by IOC	"	23.50	16.52	26.71	38.05	44.24	51.01
(b) Value: Crude Oil	Rs. Crores	3349	3552	6118	10316	11817	16538
Pol. Products	"	1909	764	3656	5834	10746	13554
Total (b) by IOC	"	5258	4316	9774	16150	22263	32092
Pol Imports as per DGCI &S		—	—	—	17086	23342	33657
(iv) Unit Value of Crude							
Oil Imports (gross)	Rs./MT.	2061	2435	2966	3772	4212	5467
5. India's Total Exports	Rs. Crores	6711	10895	32553	82673	106383	117525
6. Pol. Imports as percentage of India's total exports							
(i) Gross Imports	%	78.5	45.5	33.1	22.5	23.7	30.4
(ii) Net Imports	%	78.3	39.6	30.0	20.8	21.9	26.6
7. Contribution of oil sector to Centre/State Resources							
(i) Royalty from crude oil	Rs. Crores	41	379	2028	1561	1637	1550 P
(ii) Royalty from gas	"	3	22	138	224$	271$	330 P
(iii) Oil Development Cess		60	866	2782	2646$	2777$	2650 P
(iv) Excise & Custom duties	"	1570	3768	9179	12905	15612	20160 P
(v) Sales Tax	"	628	1564	3653	7386	8472	9900 P
(vi) Dividend	"	44	82	189	418	686	700 P
(vii) Corporate Tax/others	"	76	740	646	891	1653 E	1600 P
8. Natural Gas:							
(i) Gross Production	Mn. Cu. Mtrs.	2358	8134	17998	19381	22306	22745
(ii) Utilisation	"	1522	4950	12766	17339	20816	21261

@ : As on 1st Jan. of first year.
@@ : Includes supplies of Pol. products to Nepal.
$: Excludes royalty & cess paid/payable by private/JVCs.

E : Estimated.
* : Provisional.
P : Projected.

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I.1 HIGHLIGHTS OF INDIAN PETROLEUM INDUSTRY - 1995-97.

I. Crude Oil Production (MMT).

(a) In 1996-97 - 32.90

(b) In 1995-96 - 35.17

(c) In 1994-95 - 32.24

II. Consumption of Petroleum Products (MMT).

(a) In 1996-97 - 79.16

(b) In 1995-96 - 74.67

(c) In 1994-95 - 67.37

III. % age variation.

(a) 1996-97 over 1995-96

(i) Crude oil production : -6.5

(ii) Consumption of petroleum products: +6.0

(b) 1995-96 over 1994-95

(i) Crude Oil production. + 9.1

(ii) Consumption of Petroleum products +10.8

IV. Gross Import of Crude Oil (MMT)

(a) 1996-97 - 33.91

(b) 1995-96 - 27.34

(c) 1994-95 - 27.35

V. Refineries Data -

(a) No. of Refineries (as on 1.4.96) - 14

(b) Total Refining capacity (as on 1.4.96) - 60.40 MMT

(c) Throughput processed - 62.87 MMT (1996-97)

(d) Capacity Utilisation - 104.1% (1996-97)

VI. Natural Gas Production (BCM) during 1996-97.

(a) Total production	—	22.74
(b) (i)Off shore production	—	16.79
(ii)On shore production	—	5.95
(c) Gas Flared.	—	1.46

VII. Overall performance of PSUs.

(a) Gross Profit before tax -

(i) in 1996-97	—	Rs. 8619 crores.
(ii) In 995-96	—	Rs. 8508 crores.
(iii) in 1994-95	—	Rs. 6466 crores.

(b) Net profit after tax -

(i) In 1996-97	—	Rs. 5604 crores.
(ii) In 1995-96	—	Rs. 5250 crores.
(iii) In 1994-95	—	Rs. 4640 crores.

Continued.....

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Continued.....

I.2. (a) CHRONOLOGY OF IMPORTANT EVENTS INTHE INDIAN PETROLEUM INDUSTRY DURING 1995-96

A. EXPLORATION AND PRODUCTION

1. OIL INDIA LIMITED

1995	Shalmari to OCS-1, gas pipeline (20 Km long) commissioned.
April	New well head production set up commissioned and oil discovered at HLF (NHK-490) in Bhekulajan.
	NHK-430 successfully completed with gravel pack.
May	New water injection station at GCS-6 was commissioned.
June	The first ever production sharing contract of oil operative in OIL's Kharsang oil field under Ningru mining lease.
	Pressure of hydrocarbon established in NHK-491 (LOC.HJZ) in Rajali Structure.
	Two additional Nitrogen pumping units commissioned.
September	Oil discovered in NHK-493 (LOC.HJD) in Rungaliting structure.
November	Oil found in Borhapjan-1 (LOC DCZ) in a new structure - Borhapjan.
December	Leakage in 8" Duliajan-Digboi pipeline near AGC's main gate.
	95/8" OD casing string lowered and cemented successfully at LOC-KUG to a depth 4767M at shortest possible time handling maximum weight and torque of 372 tonnes and 1600 ft. LBS respectively, recorded the longest and heaviest weight of such casing string in country and one of the few ones in the subcontinent.
March 1996	Pour Point Depressant injection plant commissioned at Shalmari OCS.
	New well head production set up commissioned in Hatiali location HLP (NHK-495).
	Highest ever LPG production fo 55780 tonnes recorded, surpassing the modified plant capacity.

2. OIL & NATURAL GAS CORPORATION LTD.

1995	New well platform S-1-6, a part of S-1 sand development (free gas) in Bombay High put on
April	production.
May	HSB well platform commissioned and put on early production during the month.
	Supply of additional 139 MMSCM natural gas through HBJ pipeline at offshore installations and at Hazira.
July	Gas struck in 2 wells in K.G. Basin onland.
	First well for coal bed Methane exploration in India spudded in Durgapur depression (W.B.).
	Third generation mud system for improving drilling efficiency of deeper wells introduced.
August	Oil & gas indications found in well B-15-A of B-15 structure and gas struck in well C-43-1 of C-43 structure of Bombay Offshore.
	A new well platform S-1-5, a part of S-1 sand Development (free gas) in Bombay High put on operation.
September	Gas struck in 2 wells - in Cachar and KG Basin (Onland).
	CFU-II at Uran commissioned for regular production of LPG and NGL.
	Polymer Injection Plant at Sanand (Gujarat) commissioned.
October	Gas struck in Mahadevpatnam structure of KG Basin (Onland).
	Additional Gas Handling system at Uran commissioned.

Continued.....

November	Oil struck in well Pundi #2 in Cauvery Basin.
	Additional Gas Drier Unit at Uran commissioned.
	Mandapeta GCM in KG project commissioned.
December	Oil struck in well Khamboi #1 of Cambay Basin (WRBC).
1996 January	Despatch of gas from newly commissioned 42" SBHT line started.
February	Gas struck in well C-39-1 of Bombay Offshore.
March	Oil struck in well Kizhvalur #1 in Cauvery Basin (Onland).

3. ONGC VIDESH LTD. (ONGC OVERSEAS)

1995 June	Farm-out Agreement (FOA), Joint Operating Agreement (JOA) and Deed of Assignment (DOA) with British Gas for participation in North Zaafarana offshore Concession excluding Zaafarana Field in the Arab Republic of Egypt signed.
	MOU with Enserch India Inc. for formation of Joint Venture Company in India to acquire underdeveloped or developed areas/fields, properties for exploration/development of hydrocarbons in any part of the world.
July	FOA and DOA signed with M/s Command Petroleum for participation in Fejaj Permit, Tunisia for petroleum exploration.

4. GAS AUTHORITY OF INDIA LIMITED

1995 April	MOU signed with the National Iran Oil Company (NIOC) to expedite the feasibility study for the proposed Indo-Iran pipeline project.
September	6th GAIL-GOI MOU signed.
November	Dividend of Rs. 51 crore for 1994-95 inclusive of Rs. 49 crore to GOI paid.
	Loan agreement with Bank of India signed for financing upto $ 25 million for the import Steam Turbine Cracked Gas, Ethylene and Propylene Compressors to be supplied by Oebara Corporation, Tokyo, Japan.
	First stage PIB clearance for proposed LPG pipeline from Kandla to Delhi received.
	ISO 9002 awarded for HBJ System.
1996 January	First stage PIB clearance received for the Rs. 340 crore LPG Plant at Auraiya.
	GAIL launches 'on-line' CNG in Delhi.
	MOU with Brown and Root of UK for Joint Study to examine the feasibility of the import of Gas from Myanmar signed.

B. REFINING

1. BHARAT PETROLEUM CORPORATION LTD., BOMBAY

1995-96	Mumbai refinery commissioned the MTBE production unit in February'96 for manufacture of Unleaded Petrol (ULP), to meet full requirement of Mumbai. First batch of HSD with reduced sulphur content of 0.5% (by weight) supplied.
	Highest ever production of LPG including C3, Hexane and MTO achieved.
	The foundation stone of the Corporation's Joint Venture Refinery with Oman Oil Company laid at Bina (MP) on 16.12.1995.

2. BONGAIGAON REFINERY & PETROCHEMICALS LIMITED, ASSAM

1995-96	Highest production of High Speed Diesel, Motor Spirit and LPG and record sales volume for CPC, PSF (Domestic) and Solvents, record turnover of Rs. 812 crores and highest ever net profit of Rs. 90 crores achieved during 1995-96.

Continued.....

	A new "Speciality Solvent" developed and to be marketed soon.
1995 May	Crude Distillation Unit-II commissioned.
June	Government clearance for setting up of an LPG Bottling Plant obtained.
August	Debottlenecking of Reformer Unit of Xylene Plant completed and commissioned.
1996 January	Regular LPG production from DCU-I started.
March	Delayed Coking Unit-II commissioned.

3. COCHIN REFINERIES LIMITED, COCHIN

1995-96	Records set in Crude thruput (7.42 MMT), FCCU thruput and production of LPG, MS, HSD, SKO, Bitumen and Toluene.
1995 December	The Central Electricity Authority, GOI clearance inprinciple for the CRL 500 MW Power Generation Project received.
1996 March	Production and marketing of mixed Aromatic Solvent started.

4. HINDUSTAN PETROLEUM CORPORATION LTD.

Actual performance vis-a-vis MOU targets "Excellent" for the fifth consecutive year.

44.70% of the paid-up equity capital of the Corporation disinvested (2.485% equity in favour of employees) as on March 31, 1996.

HPCL first major oil companies to make its maiden public issue of 173.50 lacs equity shares of Rs. 10 each along with detachable tradeable warrants, 135.45 lacs shares to Indian Public/ NRIs/shareholders/employees and 38.05 lacs shares to Financial Institutions/Mutual Funds at premiums of Rs. 330 and Rs. 380 per Share respectively, aggregating to Rs. 608.93 crores. The public issue was overshbscribed and the allotment of the shares has been completed.

Sales turnover of Rs. 14862 crores, net profit of Rs. 514.24 crores and internal resources generated of Rs. 642 crores recorded.

Rs. 64.23 lakhs spent on SC/ST Special Component Plan and Tribal Sub Plan and Rs. 49.38 lakhs on Welfare Activities for Weaker Sections (OBC).

Mumbai & Visakh Refineries

For the fourth consecutive year the overall capacity utilisation of the refineries stood at more than 110%.

Mumbai Refineries

Achieved production of MS (226.2 TMT), Solvent-1425 (36.5 TMT), Hexane (52.3 TMT), MTO (45.9 TMT), Bulk Bitumen (210.1 TMT) and HVI (259.2 TMT) during 1995-96.

Visakh Refineries

Acheived crude throughput of 5.04 million toones exceeding the total refining capacity for the fourth year in succession and processing of 5 million tonnes of crude (capacity utilisation of 112%) and production of LPG/Propylene (159 TMT) and HSD (1901 TMT).

Visakh Refineries Expansion

Proposal for expansion by 3 MMTPA cleared at an estimated cost of Rs. 998.26 crores in September 1995 for completion in 36 months.

Joint Venture Projects

1. **Mangalore Refinery & Petrochemicals Ltd. (MRPL)**

Mangalore Refinery & Petrochemicals Ltd. (MRPL), the country's first ever joint venture refinery, promoted by HPCL and Indian Rayon Industries Ltd. & its Associate group of companies commissioned in March 1996, three months ahead of schedule.

Continued.....

PIB approval to capacity expansion from 3 to 9 MMTPA received in March 1996. CCEA clearance pending.

2. Hindustan Oman Petroleum Corp. Ltd. (HOPCL)

The 6 MMTPA grassroot refinery co-prommoted with Oman Oil Co. awaiting final GOI approval.

3. JVC with Exxon and Total, S.A., France

Two separate MOUs signed with M/s EXXON International, USA and M/s TOTAL, S.A., France in November 1995 to establish Joint Venture Companies (JVCs) with equal participation, initially focusing on the development of the infrastructure for import & marketing of LPG in the country and extend its activities in other areas in the downstream sector.

4. Hindustan Colas Limited (HINCOL)

JVC, Hindustan Colas Limited formed with M/s Colas, S.A., France for setting up a 20000 TPA capacity plant at a cost Rs. 4.96 crores for manufacture and marketing of bitumen emulsion in India.

The first state-of-the art Bitumen emulsion plant at Vashi, New Mumbai commissioned in March 1996.

5. JVC for exploration and Production of Oil & Natural Gas

Identification of international consortium partners and activities leading to the formation of the JVCs with Financial Institutions for E&P in progress.

5. INDIAN OIL CORPORATION LTD.

(a) REFINERIES

(I) ASSAM OIL DIVISION, DIGBOI, ASSAM

1996 March	Digboi Refinery Modernisation Project mechanically completed. (commissioned on 5.6.96)

(ii) GUWAHATI REFINERY, GUWAHATI, ASSAM

1995 August	First DCU furnace feed pump change over without shutdown of the unit successfully carried out.
September	Received ISO-9002 accreditation.

(iii) BARAUNI REFINERY, BARAUNI, BIHAR

1995 October	Received ISO-9002 certificate.
December	BG (white oil) loading for Raxaul commenced w.e.f. 3.12.95 (MG loading discontinued from 19.1.96).

(iv) GUJARAT REFINERY, KOYALI, GUJARAT

1995 May	Received ISO-9002 accreditation.
June	Fully automated POL tankwagon loading gantry commissioned.
November	A new product Food Grade Hexane produced and supply commenced.
1996 March	SO2 analysers in boilers of TPS and CO-generation plant of GT's commissioned.

(v) HALDIA REFINERY, HALDIA, WEST BENGAL

1995 August	A new grade of LOBS, HN-LVI produced.
September	New grade of LOBS, 100 Neutral produced.

Continued.....

November	A new grade of LOBS viz., Cylinder Oil produced.
	Use of low sulphur internal fuel oil, generated through processing of low sulphur crude in blocked out operation in the existing Crude Distillation Unit started from environmental considerations.

(vi) MATHURA REFINERY, MATHURA, U.P.

1995	
April	Two stage desalter commissioned for improving on-stream factor of Crude Distillation Unit.
August	Supply of low lead MS to Taj Trapezium commenced.
September	Back pressure turbine for BFW pump commissioned for Fuel saving.
	Received ISO-9002 accreditation.
1996	
January	Propylene Recovery Unit for production of high value Propylene commissioned and despatch commenced in March'96.
March	Despatch of low sulphur HSD (0.5% wt. sulphur max.) commenced for Delhi metro and Taj Trapezium.

(vii) PANIPAT REFINERY PROJECT

1995	
August	Unit-I Boiler hydrotested.

(viii) EASTERN INDIA REFINERY PROJECT

1995	
September	MOU signed between Indian Oil Corporation Ltd. and Kuwait Petroleum Corporation (KPC).
1996	
March	Approval received from CCFI for foreign investment by KPC.

(ix) BUSINESS DEVELOPMENT AND CONSULTANCY GROUP

1995	
October	Board approval received for MTBE production at Gujarat refinery (estimated cost: Rs. 36 crores) and chemical grade Propylene production at panipat Refinery (estimated cost Rs. 45.35 crores). Projects under implementation.
1995	
December	MOU with Punjab State Industrial Development Corporation (PSIDC) signed for setting up of grassroot refinery in the state. Broad Areas of Understanding (BAU) signed with Saudi Arabia Oil Company (Saudi Aramco), National Oil Company of Saudi Arabia for the refinery.
1996	
February	Memorandum of Collaboration (MOC) signed between M/s Petronas, Malaysia and IOC for carryng out joint feasibility studies in the areas of refining, petrochemicals, LPG import, lube blending/ packaging/retailing, R&D activities, trading and training, with GOI approval.
March	Training imparted to officers/technicians of Petronas Penapisan (Melaka Refinery), Malaysia at Gujarat Refinery in Hydrocracker/Hydrogen/Sulphur Recovery units.

(B) PIPELINES DIVISION

1995	
April	Guwahati-Siliguri Pipeline obtained the ISO 9002 Certification
June	Phase-I activity of MDAJ Hook-up project involving laying of six kms 14" OD twin Plines and facilities for delivering for marketing at Panipuat completed.
1996	
January	Haldia Barauni Crude Oil Pipeline Project approved by the Government of India.
	Kandla-Sanganer and Kot Salawas sections of Kandla-Bhatinda Pipeline commissioned.
March	Overall annual throughput of 24.240 MMT achieved.

6. MADRAS REFINERIES LIMITED, TAMIL NADU

1995	
April	Supply of Unleaded Motor Spirit (MS) to Indian Oil Corporation, inaugurated at MRL, Manali.
May	Additional Storage Facilities for Fluidised Catalytic Cracking Unit (FCCU) feed at Manali Refinery commissioned.

Continued.....

September	MOU signed with GOI for 1995-96.
November	Paid Rs. 19.32 crores towards GOI's dividend.

C. MARKETING

1. BHARAT PETROLEUM CORPORATION LTD., BOMBAY

ULP introduced initially in 53 retail outlets in 4 major Metros and 6 Radial Routes from April 1995, and extended to 100 by March' 96.

Distribution Network

50000 Kl tankage commissioned at various locations at the cost of Rs. 337.2 million, including Gonda and 2 tap off points at Sanganer (Jaipur) and Salavas (Jodhpur) along Kandla-Bhatinda Pipeline.

2 LPG Bottling Plants at Udaipur and Kurnool commissioned.

3 LPG Bottling plants at Solapur, Jaipur and Trivandrum received ISO Certification

Safety

OISD safety award for 1992-93 for achieving the best overall safety performance among to the LPG Marketing organisations received.

Joint Ventures

Petroleum Infrastructure Ltd., a Joint Venture Company in collaboration with M/s Gujarat Gas Company Ltd. (GGCL) incorporated on 9.5.95 to set up port terminals.

2. HINDUSTAN PETROLEUM CORPORATION LTD.

Mumbai-Pune pipeline record thruput at 3.67 MMT exceeded MOU target.

Modified bunkering installation at Kandla Port to handle an additional 1 million tonne of HSD imports completed in record time and commissioned in Oct'95.

ISO-9002 Certification operations of the Mumbai-Pune pipeline and the Lube Unit at Madras Terminal received.

Major projects completed/commissioned

* Two major POL terminals: One at Haldia at a cost of Rs. 15.21 crores and another at Mangalore at a cost of Rs. 41.72 crores.
* Three POL depots along the Kandla-Bhatinda product pipeline at Salawas, Rewari and Sanganer at a total cost of Rs. 20 crores.
* LPG filling capacity augmented from 22000 TPA to 44000 TPA each at Hubli and Aurangabad at a total cost of Rs. 8.94 crores.
* Railway siding at Bahadurgarh LPG bottling plant to save on bulk transportation cost completed.

Visakh Vijayawada pipeline project

Clearance accorded in June 1995 for execution of 356 KM 18" diameter petroleum product cross country pipeline between Visakh & Vijayawada (estimated cost of Rs. 521.61 crores) with initial capacity of 4 MMTPA expandable to 5.5 MMTPA. Project to be completed by June 1998.

3. IBP COMPANY LIMITED

1995-96

Sales of POL products : 3.27 MMT.

Unleaded petrol commissioned at 58 ROs in Metros and highways, and additional storage capacity of 26500 kls. at Wadala Terminal, Mumbai.

The joint venture agreement between IBP, IOC and Oiltanking GmbH initiated in Dec, 1995 and the approval of Cabinet Committee of Economic Affairs for the joint venture project of Navgarh and Jais obtained.

Shipment of white oil product from Haldia to Budge through a chartered barge (Prem Tetwa) started.

Continued.....

4. INDIAN OIL CORPORATION LIMITED

1995 April	MOU signed for FO/LSHS & Naphtha with DCW Ltd; RPG Industries Ltd.; Dhampur Sugar, Kosikalan; Gujarat Florochem, Varanasi; Subhash Projects; Chatterjee Group; Ginni Filaments, Lucknow; STI, Guna and Essar MPEB, Bhander.
	Agreement signed with Essar Pelletization Unit for Naptha supplies.
	Letter of understanding signed with Chatterjee Management Services/Soros Fund Management for marketing the products to be produced by the proposed refinery of 6 MMTPA.
May	MOU signed with Lupin Lab, Alwar and agreement signed with GTEC, Bharuch for supply of Naptha.
	MOU signed with Ms. Jindal Refinery for marketing the products to be produced from their proposed 6 MMTPA EOU refinery at Haldia.
June	MOU signed with CEA India Ltd., Hardwaganj for Naptha & DCW Ltd., Sahupuram for FO/LSHS.
July	MOU revalidated with RIL, Hazira for Naptha/NGL.
	Conversion of MG to BG siding completed at Raxaul at a cost of Rs. 4.24 crores.
	Resitement of Solapur Depot (16070 KL) completed at Pakni at a cost of Rs. 20.87 crores.
	LPG Bottling capacity augmented from 25 TMTPA to 44 TMTPA at Balasore by operating second shift.
August	Highest sales of (5344 MT) for CBFS was achieved during the year.
	KBPL Top at Sidhpur (29970KL) and at Jaipur (93570KL) completed.
September	Solvent'90 ex Guwahati introduced in the market.
	Highest Sales achieved of Naphtha (25088MT) during the year.
	KBPL Top at Jodhpur (73870 KL) completed.
	MOU signed with M/s GSX Petroleum for marketing the products from their proposed 6 MMTPA EOU refinery at Vakadu Mandai in AP.
October	Lighterage operations by barges at Kandla OTB started.
November	Linkage for Essar Power Ltd., Bhander received.
	Tankage at upcountry location commissioned at Tadepalli for Hexane supplies.
	Provision of Tank wagon decanting facilities at Aurangabad completed at a cost of Rs. 4.95 crores.
	Laying of 500 MM dia Dock line and 350 MM dia Decantation Line along BG siding at FST Kandla completed.
	Bottling Plant at Belgaum of 12 TMTPA capacity mechanically completed.
	NGL tankers loading ex-SPM at Ril hazira commenced.
December	22000KL tankage completed at Ernakulam Installation for Black Oil at a cost of Rs. 5.89 crores.
1996	LPG Bottling capacity augmented from 25 TMTPA to 44 TMTPA at Cochin.
January	LPG Bottling plant at Cochin obtained ISO-9002 certification.
February	First Crude Oil Delivery to MRPL
March	Introduction of Food Grade Hexane ex Koyali.
	RPC sales was (22502 MT) highest during the year.
	Introduction of Propylene at Mathura.

Continued.....

Construction of New Depot at Jatni (Cuttack) completed with a tankage of 17840 KL at a cost of Rs. 16.50 crores.

Aviation Fuel Station commissioned with Mobile Refuelling Facility at Fursatganj.

D. RESEARCH & DEVELOPMENT ACTIVITIES

1. INDIAN INSTITUTE OF PETROLEUM, DEHRADUN

1995	
April	Process for improved LPG stove released to Goyal Engineers, New Delhi.
	Sulpholane plant went on stream on IIP Technology at Cadila Laboratories, Ahmedabad.
May	IIP-AEC process on high temperature antioxidants released to tria Finechem, Bombay, and for improved LPG stove to Majestic Enterprises, Madras and Sekhari Bros, New Delhi.
June	IIP-EIL process on sulpholane extraction for BTX production released to NOCIL, BOmbay.
August	Process for preparation of Improved Wick Stove licensed to Kero Stove Industries, Ujjain.
October	Process for Improved LPG Stove released to Eee & Cee Pressing Ltd, Chandigarh
December	The Improved technology on impregnating pitches licenced to Graphite India Ltd., Bangalore.
1996 January	IIP-IFP process on pyrolysis gasoline hydrogenation licenced to Haldia Petrochemicals, Haldia.

2. INDIAN OIL CORPORATION LTD.

Research & Development Centre, Faridabad

1995-96

NRDC award 1996 for titanium complex grease received.

Eighty (80) product formulations as per MOU target developed, 78.8% progress on 5 MOU projects achieved against the target of 65%. Restructuring plan target met.

Eight new test facilities commissioned and Seven new test methods developed.

Recycle FCC pilot plant designed by R&D Centre licensed to Cochin Refineries Ltd.

A high performance long life turbine oil with D-943 life of 7500 hrs developed.

Synthetic low smoke 2 stroke engine oil meeting JASO FC specification develoed.

Improved low oil fuel ratio two stroke engine oil developed.

Nine biodegradable products including five greases and four lubricating oils developed.

Synthetic heat transfer oil for high temperature operation developed.

Fully synthetic automotive engine oil meeting API SH specification developed.

High performance synthetic rolling oil developed.

Chlorine free metal cutting fluids developed.

PAO based synthetic industrial gear oil developed.

Super high performance diesel engine oil with drain interval capability of 40000 kilometers developed and field tried.

A novel detergent additive (D-96) for lube formulations developed and patent filed.

Technology for organo clay for high temperature greases developed.

Catalytic converter for 2/3 wheelers developed in collaboration with ACC put on field trials.

Technology of bitumen emulsion developed by R&D commercialised.

Aviation gasoline (100 LL) technology developed in collaboration with IIP, Dehradun.

About Rs. 4 crores benefit/saving realised in FCC unit operation in the refineries through R&D efforts.

Continued.....

I.2. (b) CHRONOLOGY OF IMPORTANT EVENTS IN THE INDIAN PETROLEUM INDUSTRY DURING 1996-97

A. EXPLORATION AND PRODUCTION

1. OIL INDIA LIMITED

1996	
April	Commercial oil discovered in the Lower Eocene Laldong+Therria sands in well Tamulikhat- 1, three Kms east of Kathaloni structure.
June	Early Production System (EPS) at Bhekulajan area commissioned.
July	Commencement of gas supply on commercial basis by Rajasthan project to the State Electriity Board (RSEB).
August	Data processing system received at Duliajan for self sufficiency in 3 surveys.
	Commercial Oil discovered in the Lower Eocene within the Lakadong + Therria Sands in well Madarkhar- 1 (Loc. HKP) in Modarkhat structure.
September	Blow-out incident at well No. 144 due to failure of X-mass tree bean housing cap thread controlled without any damage.
October	Dandewale Gas Processing Centre (GPC) at Rajasthan commissioned.
November	In-house 3D data procesing (Dikom blow-out area) for the first time with new area Landmark Processing System.
	Commercial oil discovered in Eocene sands in the exploratory well NHK-496 (Loc. HJY) in Jutlibari structure.
December	All time record of 178 tonnes of LPG i.e. highest daily production since commissioning of the plant in 1982.
	Departmental 3D seismic party commenced shooting operation in Borhapjan-Samdang Block.
1997	
January	Commercial oil discovered in Lower Eocene Lakadong + Therria Sands in well Bachmatia-1 (Loc. HKT) 3 kms west of Kathaloni oilfield.
	Record LPG production of 5,172 tonnes in a month achieved.
February	Commercial gas discovered in well Chabua (Loc. HKY) in Chabua structure, about 5 km ENE of well NHK 480 m (Haliali area).
March	Directional drilling in 17. 1/2" hole section carried out for the first time in Oil India at Loc. DCZ-1 (Borhapjan-1).
	Water Injection Station at Shalmari area commissioned.
	Commercial gas discovered in well Sealkati-1 (Loc. HKQ) drilled on the Sealkati structure, 6 km east of Dikom oilfield.
	Tanot Gas Gathering Station (Tot-GGS) at Rajasthan commissioned, for production and supply of 0.55 MMSCMD of natural gas to GAIL/RSEB.

2. OIL & NATURAL GAS CORPORATION LTD.

1996	
May	Wadsama-1 well to explore deeper sands within Cambay shale alongwith Kalol sands, flowed oil @8 m3/d at a depth of 1963-65 metres.

Continued.....

June	Rangapuram-1, in KG basin, flowed gas @ 30,100 M3/day through 16/64" choke from a sand within Pallakolu shale (object-I in the interval 2836-2839m), two more objects within Parsalapudi Formations also flowed gas @32950 m3/d and 75107 m3/d respectively.
	Well Kesanapalli West_I (KSP-W-1) in K.G. basin on land, on testing of object-I (2541-2536m) flowed 53,000 m3/d of gas and 26 m3/d of condensate through 6mm bean from sand within Matsyapuri Formation. Subsequently Object II (2943-2940m) and object IV (2421-2419m) also proved to be hydrocarbon bearing.
July	Well Kutralam-I in southern flank of Kumbakonam-Madanam ridge of Cauvery Basin, on testing of the interval 2378-75m, 2372-68m and 2364-58m gas @98,000 flowed m3/d and 37,000 m3/d through 6mm and 4mm bean respectively, with traces of condensate from a sand within Bhuvanagiri Formation.
	Well Kherwa-2, drilled down to 1951m to explore Mandhali sands flowed oil and gas in the interval of 1781-1783. 5m.
August	One train each of condensate (sour) fractionating unit (CFU) under Hazira Terminal Expansion Phase-III, gas sweetening unit (GSU) and gas dehydration unit (GDU) commissioned.
	Commissioning activities of gas turbine (open cycle) under combined cycle power plant (CCPP) in Gandhar Development Ph. II started.
	Panna SPM recommissioned by providing MSV support to JVC, and production resumed.
September	Well Asmali-2 located SW of Dholka field in Cambay basin flowed oil @ 15 m3/d through 5mm bean.
	Mekrang prospect, north of Borholla field conventionally tested in the interval of 2872-2883m within Sylhet limestone, reported feeble flow of oil and gas on compressor application.
October	Well B-28-2 on B-28 structure located South West of Bassein field within Mukta formation flowed gas and condensate being the first hydrocarbon bearing well.
November	Well Nandasan-30 (NNAT) drilled in Eastern block of Nandasan field flowed oil & gas being the first oil and gas bearing well within Mehsana member of Kadi formation.
	Well B-193-2 (A) drilled on B-193 prospect South West of Bassein field on testing flowed oil & gas from Bassein & Mukta formations.
December	ONGC has prequalified for rig service contract of Sylhet Gas field Co. Ltd. in Bangladesh.
1997	
February	Well Sadewala #4 drilled on Jaisalmer-Mari Arch of Jaisalmer basin flowed gas @ 15,000 m3/d, 15205 m3/d, 18,000 m3/d and 19,000 m3/d through 3 mm, 4mm, 5mm & 6mm beans respectively.
	Well Tulsapatnam # 1 in Cauvery basin flowed oil @ 14 m3/d through 8mm bean.
March	Early Production System at Nandej-14 commissioned.

3. ONGC VIDESH LTD. (ONGC OVERSEAS)

1996	
April	Board approval for joint venture participation in Exploration and production blocks of Lake Mongoulois Field, Louisiana and empanelment of three international merchant bankers to seek advice on undertaking activities in foreign countries, restructuring of assets and review of portfolios.
	MOU signed with Kazakhstan Caspishelf (KCS) of Kazakhstan for exploration and development of oil and gas field in Kazakhstan.
May	Protocol signed with Munaygaz as follow up of MOU signed on 14.2.1996.
October	Board approval for formation of JVC with 50% participating interests in partnership with Enserch of USA.
November	Withdrawal from Exploration Block 38, Socotra Offshore, Yemen approved.

Continued.....

4. GAS AUTHORITY OF INDIA LIMITED

1996

May — Accord on employees' long-term settlement signed.

June — Gas supply to GVK industries in the Krishna-Godavari basin, Andhra Pradesh, commenced.

December — MOU agreement signed for Ravva Gas, and contract with IOCL for supply of 0.6 MMSCMD gas for Mathura Refinery.

1997

January — Gas supply to the NFCL in the Krishna-Godavari basin commissioned.

Gas supply contract between GAIL and Gujarat Torent Energy Corporation (GTEC) signed.

February — Pilot project for Delhi city gas distribution inaugurated.

March — Signed contract with ASEB for supply of 0.40 MMSCMD gas at Lakwa, Assam, and with Mahanagar Gas Limited for supply of 1.50 MMSCMD gas in the city of Mumbai.

505 Km. pipeline between Vijaipur and Dadri and spurline to Mathura Refinery fully commissioned.

B. REFINING

1. BHARAT PETROLEUM CORPORATION LTD., BOMBAY

1996-97

An all time high 7.56MMT of crude processed.

Highest Production of Hexane (30520 tonnes), Aromatics-Benzene & Toluene (102,222 tonnes), Mineral turpentine Oil (84465 tonnes) and Special Cut Naphtha (SCN).

Lowest fuel and loss at 5.94% wt. on crude in the last four years.

Two new crude oil tanks with effective storage capacity of 40 TMT each and two Slop tanks with associated pumping facilities commissioned.

First high efficiency boiler mechanically completed and commissioned.

Two dedicated unleaded gasoline storage tanks of 6000 KL capacity each commissioned in December 1996 at an estimated cost of Rs. 50 million.

Received ISO 9002 certification from Det Norske Veritas Netherlands in September 1996.

JOINTVENTURE PROJECTS

The Commpany's state-of-art lubricants blending plant at Tajola commissioned in December 1996 with capacity to produce 5000 MTPA of industrial and automotive lubricants on a single shift basis.

BPC identified as one of the nine "Navratnas", to obtain support for efforts to become global players, through enhanced autonomy and greater powers.

Memorandum of Understanding signed with GOI for the 7th year

2. BONGAIGAON REFINERY & PETROCHEMICALS LIMITED.

1996-97

Highest level of 1.542 MMT of crude oil processing during the year 1996-97.

Augmentation of Fire Water System, Continuous Stack Monitoring & Ambient Monitoring facilities and Tertiary Treatment Plant for recycling of treated factory waste water completed.

Record sales volume of 88 thousand metric tonnes for Raw Petroleum Coke and turnover of Rs. 839 crores achieved.

A new type of fabric developed by blending BRPL Polyester and locally available silk (Muga).

Continued.....

3. COCHIN REFINERIES LIMITED, COCHIN

1996-97

Annual Capacity utilisation for CDU-1 was 100.06%, for the ninth consecutive year and for CDU-II 93% against the norm of 80%.

All physical parameters of the MoU in Crude Oil thruput, LPG production, total distillates, total aromatics and plant Fuel & Loss met, achieving Excellent rating for 6 th successive year.

Cumulative 100 million tonnes of crude oil processed, and records in SKO and ATF production set.

The FCC Pilot Plant commissioned in May 1996.

Two Ambient Air Quality Monitoring Stations out of three commissioned.

The Visbreaker Unit modernised incorporating the Soaker Technology for improvement in product yield and reduction in energy consumption, commissioned in March 1997.

4. HINDUSTAN PETROLEUM CORPORATION LTD.

1996-97

MOU with GOI for 1997-98 signed.

Achievement of "Excellent" performance vis-a-vis MOU targets for the sixth year in succession.

Record quantity of crude processed by Mumbai & Visakh refineries during 1996-97 at 11.39 MMT against the installed capacity of 10.00 MMT, for the fifth successive year.

The Mumbai-Pune product pipeline achieved the highest ever thruput of 3.76 MMT.

Mumbai Refinery recorded LPG production of 139 TMT and asphalt production of 458 TMT.

Lube Refinery recorded the highest HVI production of 262 TMT.

Visakh Refinery achieved FCC-II thrupt at 632 TMT and SKO production of 688 TMT.

Conversion of Hexane Extraction Unit to use new safer solvent N-Methyl Pyrollidone (NMP) at Mumbai Refinery mechanically completed at a cost of Rs. 15.44 crores.

Mumbai Refinery: Hybrid process technology developed for all grades of Lube Oil Base Stock (LOBS) on bench scale in collaboration with IIP, Dehradun to help realise better yields of LOBS.

Visakh Refinery: Implemention of advance controls & optimisation strategies to improve yields & quality.

Mangalore Refinery and Petrochemicals Ltd. (MRPL)

This joint venture with Indian Rayon and associated group of companies proposes to expand its capacity from 3 MMTPA to 9 MMTPA in stages. Government clearance obtained in November 1996.

M/s. Total SA of France

CCFI approval for setting up an LNG terminal in Southern India obtained in March 1997.

JVC grassroot Refinery in Punjab

Letter of Intent (LOI) received in April 1996 for setting up of refinery and Stage I clearance in February 1997.

5. INDIAN OIL CORPORATION LTD.

(a) REFINERIES

Guwahati, Barauni and Digboi refineries started production of low lead MS (0.15 gms of Lead/ ltr of MS) through blending of MTBE for the first time to supply low lead MS throughout the country w.e.f. 1.1.97. Despatch commenced in Dec. '96, All IOC Refineries now produce low lead MS.

Continued.....

	(I) ASSAM OIL DIVISION, DIGBOI, ASSAM
1996	
April	Two number of Gas Turbine Generators (GTG) each of 8.5 MWH capacity alongwith Heat Recovery Steam Generators (HRSG) of 35 MT/HR capacity commissioned.
	ISO-9002 accreditation obtained in Oct. '96 for refinery and LPG Bottling Plant at Silchar.
June	The Digboi Refinery Modernisation Project (DRMP) and new CDU/VDU of 0.65 MMTPA capacity under it commissioned.
	(II) GUWAHATI REFINERY, GUWAHATI
	Digital Control System successfully commissioned in all the process units during the year.
1997	
Jan.	Satellite Communication System (HV net) commisioned.
	(III) BARAUNI REFINERY, BARAUNI, BIHAR
1996	
October	5th Boiler started and first Digital Control System in the Refinery commissioned (Yokogawa Make).
1997	
December	Increased crude oil supply to Barauni Refinery with crude oil despatch from Haldia, through BTPN wagons started.
February	Catalytic Reforming Unit (CRU) mechanically completed and inaugurated.
March	Stage-I approval obtained for Low Cost expansion for 6.00 MMTPA.
	(IV) GUJARAT REFINERY, KOYALI, GUJARAT
	New product, IOC Residue 96 (Bottoms of Hydrocracker unit) introduced.
1996	
November	Xylene Reformate Despatch to alternate customer i.e. M/s RIL by road commenced.
December	Stage-II approval obtained for AU-V.
	(V) HALDIA REFINERY, HALDIA, WEST BENGAL
	80 meter tall stacks constructed & commissioned for all the three boilers of TPS, as pollution control measures.
August	Pre-fractionator and second stabiliser column in CDU alongwith offsite crude booster pumps, installed & commissioned with in-house expertise.
	(VI) MATHURA REFINERY, MATHURA, U.P.
	DCS in all Boilers, DM Plant. APC in VBU & PRU with in-house efforts commissioned.
	Satellite communication system (HV net) commissioned.
1996	
April	New product 'Propylene' introduced.
May	Regular despatch of Solvent-95 commenced.
	First refinery in Asia and 3rd in the World to be accredited with coveted BS 7750/ISO 14001.
September	Bitumen production increased from 35 to 55 TMT/month level with revamping of VDU phase-II.
	(VII) BUSINESS DEVELOPMENT AND CONSULTANCY GROUP
	Training of 59 employees of Petronas, Malaysia in 5 batches in Hydrocracker Unit at Gujarat refinery.
	Memorandum of collaboration signed between IOC and Marubeni Corporation, Japan in August' 96.

(b) PIPELINES DIVISION

1996
April — Board approval accorded for branchline from HMR to Budge at a cost of Rs. 40 crores.

November — Two Pumps commissioned at Panipat for pumping from line balancing tanks towards Sangrur and Bhatinda as well as MJPL TOPs under KBPL Project.

December — Augmentation of Salaya-Viramgam-Koyali pipeline approved by GOI at an estimated cost of Rs. 304.12 crores (including forex component Rs. 50.08 crores)

Board approval accorded for construction of three number of 60,000 Kls capacity strategic crude oil storage tanks at Chaksu at Rs. 42.80 crores.

1997
February — Board approval accorded for the first stage expansion of Kandla Bhatinda Pipeline to 7.5 MMTPA at Rs. 39.68 crores.

March — Pipeline annual throughput of 27.827 MMT

Total turn over (of COT) for 1996-97 is Rs. 458.28 crores and the profit is Rs. 112.47 crores.

6. MADRAS REFINERIES LIMITED, TAMIL NADU

1996
August — The LPG Extraction Unit at MRL Cauvery Basin Refinery at Panangudi commissioned and commercial production started.

Agreement signed with Kerala SIDCO, for MRL Regional Office space and facilities, for the sale of paraffin wax in Kerala.

September — The Steam Turbo Generator at MRL Cauvery basin Refinery formally commissioned.

October — MOU with IOC, for Marketing rights of petroleum products from MRL Manali Refinery.

Rs. 19.31 crores paid to GOI, as dividend for 1995-96.

December — One 1600 KVA, 6.6KV/433V transformer along with PMCC commissioned in Wax Expansion Electrical Works at MRL Manali Refinery complex.

1997
February — The two new Wax Pelletiser Units costing Rs. 5 crores installed, successfully commissioned and production inaugurated at Manali refinery

C. MARKETING

1. BHARAT PETROLEUM CORPORATION LTD., BOMBAY

Three new Generation Retail Outlets at par with international standards commissioned, under own brand.

Retail outlets selling Unleaded Petrol increased to 245 as on 31.3.97.

HSD with 0.5% Sulphur introduced in metros and Taj Trapezium area from 1.4.1996.

Agreement signed with GVK Industries, Andhra Pradesh (the first independent power producers in the country) for the supply of Naptha to their power plant.

11 new lube distributorships commissioned.

A 22 TMTPA LPG Bottling Plant commissioned at Chennai.

First LPG Import Terminal in the Industry commissioned at Okha by Petroleum Infrastructure Ltd. (PIL), a joint venture company in collaboration with Gujarat Gas Co. Ltd. under the Parallel Marketing Scheme.

First Industry award of ISO 9002 accreditation for LPG Plant.

Continued.....

Distribution Network

Product tankage of 1,95,400 KL commissioned at various locations across the country.

Induction of 218 Bogie Type (BPTN) tankwagons under the railways "Own Your Wagon Scheme".

2. HINDUSTAN PETROLEUM CORPORATION LTD.

Market share improved from 19.5% in 1995-96 to 20% during 1996-97.

Sales Turnover of Rs. 18089.09 crores and record profit after tax of Rs. 612.22 crores achieved.

Two new depots at Pakni and Bhitoni at Rs. 14 crores commissioned to strengthen marketing infrastructure network.

Major Projects Completed/Commissioned

Capital Expenditure of Rs. 980 crores for projects (including advance against equity in JVCs of Rs. 130 crores) incurred.

LPG import facilities at Mangalore of 6,00,000 TPA capacity completed and commissioned at Rs. 175.65 crores for estimated annual forex savings of Rs. 120 crores.

LPG Bottling Plant (44,000 MTPA) at Ankleshwar commissioned at Rs. 24.30 crores to cater to LPG domestic market in Gujarat.

Kandla virtual jetty commissioned at Rs. 18 crores.

3. IBP COMPANY LIMITED

1996-97

Sales of Petroleum Products at 3.47 MMTs.

30 Retail Outlets and 7 SKO/LDO dealerships commissioned.

Unleaded MS commissioned at 5 ROs in Metros and 39 ROs in State Capitals/Highways/Major Towns during 1996-97.

Commissioned additional storage capacity of 20,230 Kls at Rewari, Haryana and 6,665 Kls at Partapur, U.P.

4. INDIAN OIL CORPORATION LIMITED

1996

April — Construction of 12 TMTPA LPG Bottling Plant at Trisundi completed.

May — Virtual Jetty at Kandla costing Rs. 1651 lakhs completed.

June — New Terminal with 72900 KL tankage on KBPL at Rewari TOP and new Lighterage Terminal with 1.2 lakhs KL and allied facilities at Paradeep costing Rs. 40 crores and 5 TMTPA LPG Bottling Plant at Sikkim completed.

July — New Depot with a tankage of 16900 KL and allied facilities at Feroke (Kerala) costing Rs. 1800 lakh Completed.

August — Completed construction of LPG Bottling Plant at Tripura and Madanpur-Khadar PH-II having capacity of 5 TMTPA and 44 TMTPA respectively.

September — Commissioned Aviation fuel facility at Bhuj.

Completed construction of 22 TMTPA LPG Bottling Plant at Trichy.

October — MOU signed with Madras Refineries Ltd. for marketing of their refinery products by IOC.

600 TMTPA LPG import facility at Kandla completed.

November — Completed construction of 12 TMTPA LPG Bottling Plant at Quilon.

December — MOU signed with Cochin Refineries Ltd. for marketing rights of their refinery products.

1997

January — Construction of LPG Bottling Plants at Ahmedabad (66 TMTPA), Farrukhabad (22 TMTPA), and Bikaner (22 TMTPA) at a total cost of Rs. 76.13 crores completed.

Continued.....

March — New Depot with a tankage of 12500 KL and allied facilities at Ongole (A.P.) and additional tankage of 2800 KL at Tatanagar Depot completed.

Fuel handling/storage facilities for Kerala State Electricity Board at Brahmapuram (Cochin) at Rs. 511 lakhs constructed.

D. RESEARCH & DEVELOPMENT ACTIVITIES

1. INDIAN INSTITUTE OF PETROLEUM, DEHRADUN

1996

April — National Workshop on Deposit Rating of Engine Components conducted.

September — Training Programme-cum-Workshop on Management of Strategic Changes.

November — Training programme on Petroleum Refining Technology and Related Aspects organised for Sr. Managers of the Oil Companies.

December — Training programme on Application of Fuels and Lubricants in Automotive and Industrial Machines for Sales Engineers of HPCL, Mumbai.

1997

February — Training programme on Petroleum Refining & Petrochemicals Technology for Chemical Engineers of RIL, Mumbai.

March — Programme on problems on Imports was organised.

2. INDIAN OIL CORPORATION LTD.

Research & Development Centre, Faridabad

1996-97 — Titanium complex grease won three awards/commendation

Commercial Plant for the production of titanium complex grease commissioned.

Targetted eighty product formulations developed.

Criteria met for EXCELLENT RATING against set annual targets.

Record R&D investment of Rs. 45.75 crores including highest ever capital investment of Rs. 31.00 crores.

Twenty eight new facilities added.

Multipurpose pilot plant for scale up of R&D technologies commissioned.

Commissioned high performance new products viz.,

- Six customised 'genuine oils'.
- Low oil: Fuel ratio 2-stroke engine oil.
- Transmission oil meeting Massey Ferguson CMSM specification.
- Hydraulic brake fluid meeting DOT-4 specification.
- A cost effective turbine oil as a substitute to existing turbine oil Servoprime-T.
- Refrigeration oil for a major steel plant.
- A scourable knitting oil for textile Industry.
- Eco-friendly synthetic quenching oil.
- Cost effective steel rolling oil Servo Steerol C6.
- New chemistry Servocut-S formulation meeting IS: 1115 1986.
- A long life high performance steel cold rolling oil - 17 RO for 20-High Rolling Mill.

International and national approvals for 21 SERVO products.

Process technology for napthenic acids from middle disillates.

Basic progress package for Food Grade Haxane meeting WHO specification.

Novel methodology for preparation of FCC catalyst.

I.3 INDIAN PETROLEUM INDUSTRY PROGRESS AT A GLANCE (1947-48 to 1996-97)

Year	Balance of recoverable Reserves @		Crude oil pro-duc - tion	Natu-ral gas Pro-duc-tion	Refi-nery crude Th'Put	Refi-nery pro-duction	Con-sump-tion *	Gross Imports		Net Imports		c.i.f. unit value of crude Imports (Rs. MT)	India's total Imports/ Exports		%age of POL Imports to India's Exports	Central excise & Custom duties on Pol. (Rs. Crores)	Index of Self Reli-ance
	Crude oil (MMT)	natu-ral gas (Bn.M3)	(MMT)	(Bn.M3)	(MMT)	(MMT)	(MMT)	Crude Oil (MMT/	POL pro-ducts Rs. Crores)	Crude Oil Qty. (MMT)	POL Products Value (Rs. Crores		Imports	Exports (Rs. Crores)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1947-48	4	3	.25	NA	.25	.23	2.72	-	2.36	NA	NA	-	NA	NA	NA	NA	9%
1950-51	4	2	.26	NA	.26	.23	3.46	-	3.11	NA	NA	-	NA	NA	NA	NA	7%
1960-61	45	22	45	NA	6.13	5.78	7.99	5.71	2.22	7.71	43	68	NA	NA	NA	NA	5%
1970-71	128	62	6.82	1.4	18.38	17.11	17.91	11.68 (107)	1.09 (30)	12.43	132	92	1634	1535	8.9%	638	36%
1980-81	366	352	10.51	2.4	25.84	24.12	30.90	16.25 (3349)	7.29 (1917)	23.50	5258	2061	12549	6711	78.5%	1570	30%
1981-82	469	411	16.19	3.9	30.15	28.18	32.52	15.39 (3736)	4.88 (1453)	19.29	4978	2442	13608	7806	66.5%	1693	45%
1982-83	470	420	21.06	4.9	33.16	31.07	34.66	16.95 (4044)	5.03 (1554)	16.83	4401	2386	14293	8803	63.6%	1860	55%
1983-84	526	475	26.02	6.0	35.26	32.89	35.84	15.97 (3541)	4.33 (1271)	13.30	3224	2217	15832	9771	49.2%	2488	66%
1984-85	511	478	28.99	7.2	35.56	33.23	38.80	13.64 (3430)	6.09 (1915)	12.32	3527	2515	17134	11744	45.5%	2921	70%
1985-86	500	479	30.17	8.1	42.91	39.88	40.87	15.14 (3687)	3.87 (1274)	16.52	4316	2435	19658	10895	45.5%	3788	69%
1986-87	558	497	30.48	9.8	45.70	42.76	43.66	15.48 (2120)	3.05 (653)	16.03	2362	1370	20096	12452	22.3%	4089	65%
1987-88	581	541	30.36	11.5	47.75	44.73	46.42	17.73 (2986)	4.15 (1024)	18.47	3362	1684	22244	15674	25.6%	6105	61%
1988-89	638	579	32.04	13.2	48.80	45.70	50.09	17.81 (2861)	6.50 (1560)	22.02	3897	1606	28235	20231	21.9%	6748	59%
1989-90	726	648	34.09	17.0	51.94	48.69	54.10	19.49 (4090)	6.56 (2255)	23.46	5648	2099	35412	27681	22.9%	8093	59%
1990-91	739	686	33.02	18.0	51.77	48.57	55.04	20.70 (6118)	8.66 (4660)	26.71	9775	2956	43193	32553	33.1%	9179	56%
1991-92	806	730	30.35	18.6	51.42	48.35	56.97	24.00 (7820)	9.44 (5218)	30.50	11824	3260	47851	44041	29.6%	9337	50%
1992-93	801	735	26.95	18.1	53.48	50.36	58.90	29.25 (10686)	11.28 (6360)	36.81	15439	3653	63375	53688	31.8%	10322	43%
1993-94	779	718	27.03	18.3	54.30	51.08	60.81	30.82 (10689)	12.08 (7041)	38.86	16221	3468	73101	69751	25.4%	12223	41%
1994-95	765	707	32.24	19.4	56.53	52.93	65.49	27.35 (10316)	13.95 (7522)	38.05	16250	3772	89971	82674	21.6	12905	46%
1995-96	732	660	35.17	22.3	58.74	55.08	72.52	27.34 (11517)	20.34 (12578)	44.24	22263	4212	122678	106353	22.7	15612	45%
1996-97) (P)	727	640	32.90	22.7	62.87	59.01	77.22	33.91 (18538)	20.27 (15633)	51.01	32093	5467	136844	117525	29.1	20600	40%

NA-Not Available, (P) Provisional, @-As on 1st January of the initial year, *-Excluding RBF.

I.4 COMMODITY BALANCE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS

(Million Tonnes)

Item	1950-51+	1960-61+	1970-71+	1980-81	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97*
I. Crude Oil											
1. Refinery throughput	0.3	6.6	18.4	25.8	51.8	51.4	53.5	54.3	56.5	58.7	62.8
2. Domestic Production	0.3	0.5	6.8	10.5	33.0	30.4	27.0	27.0	32.2	35.2	32.9
a) Onshore	0.3	0.5	6.8	5.5	11.8	11.4	11.2	11.6	12.0	11.9	11.4
b) Offshore	-	-	-	5.0	21.2	19.0	15.8	15.4	20.2	23.3	21.5
3. Imports	N.A.	6.0	11.7	16.2	20.7	24.0	29.2	30.8	27.3	27.3	33.9
4. Exports	-	-	-	-	-	-	-	-	-	-	-
5. Net Imports (3-4)	N.A.	6.0	11.7	16.2	20.7	24.0	29.2	30.8	27.3	27.3	33.9
II. Petroleum Products											
1. Domestic Consumption@	3.3	7.7	17.9	30.9	55.0	57.0	58.9	60.8	67.4	74.7	79.2
of which											
a) Naphtha	-	-	0.9	2.3	3.4	3.5	3.4	3.2	3.4	3.7	4.0
b) Kerosene	0.9	2.0	3.3	4.2	8.4	8.4	8.5	8.7	9.0	9.3	9.6
c) High Speed Diesel Oil	0.2	1.2	3.8	10.3	21.1	22.7	24.3	25.9	28.3	32.8	35.2
d) Fuel Oil	0.9	1.7	4.7	7.5	9.0	9.2	9.3	9.1	9.9	10.7	10.7
2. Domestic Production	0.2	5.7	17.1	24.1	48.6	48.3	50.4	51.1	52.9	55.1	59.0
of which											
a) Naphtha	N.A.	-	1.2	2.1	4.9	4.5	4.6	4.7	5.7	6.0	6.1
b) Kerosene	N.A.	0.9	2.9	2.4	5.5	5.3	5.2	5.3	5.3	5.3	6.2
c) High Speed Diesel Oil	N.A.	1.1	3.8	7.4	17.2	17.4	18.3	18.8	19.6	20.7	22.2
d) Fuel Oils	N.A.	1.6	4.1	6.1	9.4	9.6	10.4	10.3	9.8	9.6	10.3
3. Imports	3.1	2.5	1.1	7.3	8.7	9.4	11.3	12.1	14.0	20.3$	20.3$
4. Exports @@	N.A.	N.A.	0.3	Neg.	2.7	2.9	3.7	4.0	3.3	3.4	3.2
5. Net Imports (3-4)	N.A.	N.A.	0.8	7.3	6.0	6.5	7.6	8.1	10.7	16.9	17.1

* : Provisional.
\+ : On a Calender Year basis.
$: Excludes import by private parties.
@ : Excluding refinery fuel consumption. Including imports by private parties from 1994-95 onwards.
@@ : Including supplies of POL products to Nepal.
Neg : Negligible.
N.A. : Not available.

I.5a GROWTH OF PETROLEUM INDUSTRY IN INDIA
(Calendar Year)

(000 TONNES)

Year	Crude oil		Petroleum Products	
	Production	Refineries Crude Throughput	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	25628	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	29860	41226	38264	42973
1986	31157	44940	41877	45483
1987	30142	47445	44583	48048
1988	31580	47896	44730	51308
1989	33685	51974	48724	55801
1990	33311	51671	48402	57943
1991	31007	50954	47916	58462
1992	27874	54254	51041	62092
1993	26508	53509	50396	62836
1994	30905	56407	52872	64280
1995	35048	57971	54379	70269
1996(P)	32986	59688	57869	76067

(Rs. Crores)

Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS (Col. 8-11)
	Crude oil	Product	Total	Crude oil	Products	Total	
	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	9.36	30.53	132.89	-	5.72	5.72	127.17
1971	139.88	43.49	183.37	-	2.55	2.55	180.82
1972	44.25	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	3808.74	1440.70	5249.44	503.88	482.06	985.94	4263.50
1986	2069.65	818.06	2887.71	-	389.32	389.32	2498.39
1987	3105.25	884.69	3989.94	-	662.07	662.07	3327.87
1988	2811.28	1273.36	4084.64	-	472.85	472.85	3611.79
1989	3718.63	2106.33	5824.96	-	654.84	654.84	5170.12
1990	5929.62	3541.64	9471.26	-	941.40	941.40	8529.86
1991	6827.57	5533.55	12361,12	-	1041.13	1041.13	11319.99
1992	10432.44	5711.16	16143.60	-	1658.33	1658.33	14485.27
1993	10916.90	7107.23	18024.13	-	1547.22	1547.22	16476.91
1994	9915.10	7438.77	17353.87	-	1580.74	1580.74	15773.13
1995	10856.71	0251.01	21107.72	-	1728.55	1728.55	19379.17
1996(P)	17194.53	15454.63	32649.16	-	2050.49	2050.49	30598.67

* Including Refinery Fuel,(P) = Provisional

1.5b GROWTH OF PETROLEUM INDUSTRY IN INDIA
(Financial Year)

(000 Tonnes)

Financial year	Crude Oil		Petroleum Products	
	Production	Refinaries Crude Throughoutput	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	3556	33236	40828
1985-86	30168	42910	39884	43363
1986-87	30480	45699	42761	46274
1987-88	30357	47754	44728	48938
1988-89	32040	48803	45699	52882
1989-90	34037	51942	48690	56789
1990-91	33021	51772	48562	57745
1991-92	30346	51423	48349	59603
1992-93	26950	53482	50359	61655
1993-94	27026	54296	51084	63648
1994-95	32239	56534	32927	68624
1995-96	35168	58741	55081	75756
1996-97	32900	62870	59005	80714

(Rs./Crores)

Year	Growth Imports			Export/re-Export			Net pol
	Crude Oil	Products	Total	Crude Oil	Products	Total	Imports
	6	7	8	9	10	11	12
1960-61	39.23	39.84	79.07	4.40(e)	4.40	74.67	
1965-66	39.62	40.68	80.30	—	4.39	4.39	75.91
1970-71	108.72	29.91	136.63	—	4.67	4.67	131.96
1971-72	147.02	46.98	93.90	—	3.91	3.91	189.99
1972-73	146.37	60.58	206.95	—	8.16	8.16	193.79
1973-74	416.39	124.50	540.89	0.42	8.05	8.47	532.42
1974-75	916.99	195.00	11111.99	—	17.40	17.40	1094.93
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	1246.00	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	3448.97	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	1553.74	5597.68	1063.73	1197.17	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	3537.06
1985-86	3686.80	1273.7	4960.40	135.15	509.58	644.73	4315.67
1986-87	2120.19	652.69	2772.88	—	411.23	411.23	2361.66
1987-88	2986.31	1024.32	4010.63	—	648.75	648.75	3361.88
1988-89	2861.08	1559.84	4220.92	—	523.63	523.63	3897.29
1989-90	4089.35	2254.71	6344.06	—	695.56	695.56	5648.50
1990-91	6118.42	4660.21	10778.63	—	1003.92	1003.92	9774.71
1991-92	7820.05	5218.27	13038.32	—	1214.65	1214.65	11823.67
1992-93	10685.86	6359.60	17045.46	—	1606.28	1606.28	15439.18
1993-94	10688.52	7041.43	17729.95	—	1508.81	1508.81	16221.14
1995-96	10316.03	7521.71	17837.74	—	1587.38	1587.38	16250.36
1995-96	11517.00	12577.85	24094.95	—	1831.99	1831.99	22262.92
1996-97	18538.19	15688.49	34171.68	—	2079.65	2079.65	32092.03

*=Including Refinery Fuel (P) = Provisional, (e) = Estimated.

1.6 (a) PETROLEUM ENERGY IN INDIA 1984-1996 (CALENDAR YEARS)

AVAILABILITY

PRODUCTS	1984	1986	1988	1989	1990	1991	1992	1993	1994	1995	1996
1	2	3	4	5	6	7	8	9	10	11	12
IN ORIGINAL UNITS (MILLION TONNES)											
KEROSENE	5.96	6.77	7.26	8.19	8.64	8.90	8.58	8.97	9.59	10.24	10.28
ATF	1.42	1.64	1.66	1.87	1.74	1.68	1.61	1.68	1.99	2.15	2.34
HSD	13.42	15.96	17.13	20.94	20.90	22.68	24.59	25.74	28.08	31.18	35.46
LDO	1.21	1.17	1.23	1.51	1.53	1.50	1.51	1.41	1.42	1.36	1.29
FUEL OILS	7.78	7.91	7.98	8.89	9.31	9.42	9.42	9.01	9.80	6.34	6.65
OTHERS*	4.88	6.55	7.02	7.14	8.66	8.70	9.29	9.67	9.22	10.96	12.05
TOTAL	**34.67**	**40.00**	**42.28**	**49.54**	**50.78**	**52.88**	**55.00**	**56.55**	**60.10**	**62.23**	**68.07**
IN MILLION TONNES OF COAL EQUIVALENT UNIT @											
KEROSENE	11.92	13.54	14.52	16.38	17.28	17.80	17.16	17.90	19.18	20.48	20.56
ATF	2.84	3.28	3.32	3.74	3.48	3.36	3.22	3.33	3.98	4.30	4.68
HSD	26.84	31.92	34.26	41.88	41.80	45.36	49.18	51.48	56.16	62.36	70.92
LDO	2.42	2.34	2.46	3.02	3.06	3.00	3.02	2.82	2.84	2.72	2.58
FUEL OILS	15.56	15.82	15.96	17.78	18.62	18.84	18.84	18.16	19.60	12.68	13.30
OTHERS*	9.76	13.10	14.04	16.28	17.32	17.40	18.58	19.34	18.44	21.92	24.10
TOTAL	**69.34**	**80.00**	**84.56**	**99.08**	**101.56**	**105.76**	**110.00**	**113.10**	**120.20**	**124.46**	**136.14**
IN MILLION TONNES OF COAL REPLACEMENT UNIT @											
KEROSENE	47.69	54.16	58.08	65.52	69.12	71.20	68.64	71.76	76.72	81.92	82.24
ATF	10.02	12.30	12.45	14.02	13.05	12.60	12.08	12.60	14.93	16.12	17.55
HSD	120.74	143.64	154.17	188.46	188.10	204.12	221.31	231.66	247.10	280.62	319.14
LDO	10.91	10.53	11.07	13.59	13.77	13.50	13.69	12.69	12.78	12.24	11.61
FUEL OILS	15.56	15.82	15.96	17.78	18.62	18.84	18.84	18.11	19.60	12.68	13.30
OTHERS*	26.61	32.51	36.04	47.44	51.30	52.15	53.46	55.58	55.32	54.78	64.47
TOTAL	**232.13**	**268.96**	**287.77**	**346.81**	**353.96**	**372.41**	**387.92**	**402.70**	**426.45**	**445.68**	**508.31**

CONSUMPTION (#)

PRODUCTS	1984	1986	1988	1989	1990	1991	1992	1993	1994	1995	1996
1	2	3	4	5	6	7	8	9	10	11	12
IN ORIGINAL UNITS (MILLION TONNES)											
KEROSENE	5.84	6.52	7.59	8.09	8.42	8.41	8.57	8.62	8.93	9.28	9.63
ATF	1.30	1.59	1.69	1.75	1.73	1.56	1.56	1.68	1.87	2.01	2.17
HSD	13.31	15.70	18.40	20.23	21.18	21.98	24.40	25.32	27.62	30.90	34.28
LDO	1.18	1.15	1.38	1.49	1.51	1.43	1.47	1.34	1.40	1.32	1.23
FUEL OILS	7.79	8.02	8.32	8.70	9.10	8.95	9.38	9.09	9.73	10.44	10.78
OTHERS*	4.93	6.47	7.32	8.23	8.68	8.77	9.23	9.67	10.48	11.46	12.49
TOTAL	**34.35**	**39.45**	**44.70**	**48.59**	**50.62**	**51.10**	**54.61**	**55.72**	**60.03**	**65.41**	**70.58**
IN MILLION TONNES OF COAL EQUIVALENT UNIT@											
KEROSENE	11.68	13.04	15.18	16.18	16.84	16.82	17.14	17.24	17.86	18.56	19.26
ATF	2.60	3.18	3.38	3.50	3.46	3.12	3.12	3.36	3.74	4.02	4.34
HSD	26.62	31.40	36.80	40.66	42.36	43.96	48.80	50.64	55.24	61.80	68.56
LDO	2.36	2.30	2.76	2.98	3.02	2.86	2.94	2.68	2.80	2.64	2.46
FUEL OILS	15.58	16.04	16.64	1.40	18.20	17.90	18.76	18.18	19.46	20.88	21.56
OTHERS*	9.86	12.94	14.64	16.46	17.36	17.54	18.46	19.34	20.96	22.92	24.98
TOTAL	**68.70**	**78.90**	**89.40**	**97.16**	**101.24**	**102.20**	**109.22**	**111.44**	**120.06**	**130.82**	**141.16**
IN MILLION TONNES OF COAL REPLACEMENT UNIT@											
KEROSENE	46.72	52.16	60.72	64.72	67.36	67.28	68.58	68.96	71.44	74.24	7.70
ATF	9.75	11.93	12.68	13.13	12.98	11.70	11.72	12.60	14.03	15.08	16.28
HSD	119.79	141.30	165.60	182.97	190.62	197.82	219.56	227.88	245.82	278.10	308.52
LDO	10.62	10.35	12.42	13.41	13.59	12.87	13.18	12.06	12.60	11.88	11.07
FUEL OILS	15.58	16.04	16.64	17.40	18.20	17.90	18.76	18.18	19.46	20.88	21.56
OTHERS*	26.38	34.95	38.06	48.08	51.45	52.64	55.31	58.25	62.88	61.31	66.82
TOTAL	**228.84**	**266.73**	**306.12**	**339.71**	**354.20**	**360.21**	**387.11**	**397.93**	**426.23**	**461.49**	**431.95**

(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.

1.6 (b) PETROLEUM ENERGY IN INDIA 1984-85 TO 1996-97 (FINANCIAL YEARS)

AVAILABILITY

PRODUCTS	1984-85	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9	10	11	12	13
IN ORIGINAL UNITS (MILLION TONNES)												
KEROSENE	5.93	6.76	7.29	7.95	8.30	8.81	8.81	8.56	9.10	9.36	10.27	10.52
ATF	1.41	1.64	1.74	1.79	1.84	1.83	1.56	1.62	1.76	2.02	2.22	2.27
HSD	13.59	16.13	17.54	19.00	20.79	21.87	22.73	25.30	26.21	28.05	33.51	35.81
LDO	1.25	1.16	1.26	1.47	1.54	1.51	1.48	1.45	1.47	1.36	1.35	1.29
FUEL OILS	7.89	7.91	7.86	9.31	9.17	9.43	9.64	9.40	9.02	10.06	10.79	10.99
OTHERS*	5.15	6.59	7.14	7.82	8.26	8.75	8.75	9.33	9.76	9.26	10.60	11.02
TOTAL	**35.22**	**40.19**	**42.83**	**47.34**	**49.90**	**52.20**	**52.67**	**55.66**	**57.32**	**60.11**	**68.74**	**71.90**
IN MILLION TONNES OF COAL EQUIVALENT UNIT@												
KEROSENE	11.86	13.52	14.58	15.90	16.60	17.62	17.42	17.12	18.20	18.72	20.54	21.04
ATF	2.82	3.28	3.48	3.58	3.68	3.66	3.12	3.24	3.52	4.04	4.44	4.54
HSD	27.18	32.26	35.08	38.00	41.58	43.74	45.46	50.60	52.42	56.10	67.02	71.62
LDO	2.50	2.32	2.52	2.94	3.08	3.02	2.96	50.60	2.94	2.72	2.70	2.58
FUEL OILS	15.78	15.82	15.72	18.62	18.34	18.86	19.29	18.80	19.52	20.12	21.58	21.98
OTHERS*	10.30	13.18	14.28	15.64	16.52	17.50	17.50	18.86	18.04	18.52	21.20	22.04
TOTAL	**70.44**	**85.66**	**80.38**	**94.68**	**99.80**	**104.40**	**105.74**	**111.32**	**114.64**	**120.22**	**137.48**	**143.80**
IN MILLION TONNES OF COAL REPLACEMENT UNIT@												
KEROSENE	47.77	54.08	58.32	63.60	66.40	70.48	69.68	68.48	72.80	74.88	82.16	84.16
ATF	10.58	12.30	13.05	13.43	13.80	13.72	11.70	12.15	13.20	15.15	16.65	17.03
HSD	122.31	145.17	157.86	171.00	187.11	196.83	204.57	227.70	235.89	246.84	301.59	322.29
LDO	11.25	10.44	11.34	13.23	13.86	13.59	13.32	13.05	13.23	12.24	12.15	11.61
FUEL OILS	15.78	15.82	15.72	18.62	18.34	18.86	19.28	18.80	18.04	20.12	10.79	21.98
OTHERS*	27.95	33.11	36.86	40.35	46.33	51.93	52.54	53.90	56.09	55.56	56.71	58.96
TOTAL	**235.31**	**270.92**	**293.15**	**320.23**	**347.84**	**365.41**	**371.09**	**394.08**	**409.25**	**424.79**	**480.05**	**516.03**

CONSUMPTION (#)

PRODUCTS	1984-85	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9	10	11	12	13
IN ORIGINAL UNITS (MILLION TONNES)												
KEROSENE	5.96	6.65	7.23	7.73	7.38	8.42	8.38	8.48	8.70	8.96	9.32	9.65
ATF	1.34	1.60	1.65	1.71	1.78	1.68	1.56	1.57	1.74	1.90	2.08	2.15
HSD	13.70	16.01	17.66	18.80	20.69	21.14	22.68	24.29	25.88	28.26	32.25	35.02
LDO	1.20	1.16	1.24	1.44	1.46	1.51	1.46	1.41	1.37	1.37	1.31	1.23
FUEL OILS	7.94	8.05	8.14	8.46	8.64	8.99	9.20	9.27	9.19	9.89	10.69	10.85
OTHERS*	5.07	6.62	7.14	7.80	8.42	8.68	8.85	9.21	9.79	10.41	11.77	12.63
TOTAL	**35.21**	**40.09**	**43.06**	**45.94**	**48.37**	**50.42**	**52.13**	**54.23**	**56.67**	**60.79**	**67.42**	**71.53**
IN MILLION TONNES OF COAL EQUIVALENT UNIT@												
KEROSENE	11.92	13.30	14.46	15.46	14.76	16.84	17.76	16.96	17.40	17.92	18.64	19.30
ATF	2.68	3.20	3.30	3.42	3.56	3.36	3.12	3.14	3.48	3.80	4.16	4.30
HSD	27.40	32.02	35.32	37.60	41.38	42.28	45.36	48.58	51.76	56.52	64.50	70.04
LDO	2.40	2.32	2.48	2.88	2.92	3.02	2.92	2.82	2.74	2.74	2.62	2.46
FUEL OILS	15.88	6.10	16.28	18.92	17.28	17.98	18.40	18.54	18.38	19.78	21.38	21.70
OTHERS*	10.14	13.24	14.28	15.60	16.84	17.36	17.70	18.42	19.58	20.82	23.54	25.26
TOTAL	**70.42**	**80.18**	**86.12**	**91.88**	**96.74**	**100.84**	**104.26**	**108.46**	**113.34**	**121.58**	**134.84**	**143.06**
IN MILLION TONNES OF COAL REPLACEMENT UNIT@												
KEROSENE	47.67	53.20	57.84	61.84	59.04	67.36	67.04	67.84	69.60	71.68	74.56	77.20
ATF	10.02	12.00	12.38	12.83	13.35	12.60	11.70	11.78	13.05	14.25	15.60	16.13
HSD	123.26	144.09	158.94	169.20	186.21	190.26	204.12	218.61	232.92	248.69	290.25	315.18
LDO	10.78	10.44	11.16	12.96	13.14	13.59	13.14	12.69	12.33	12.33	11.79	11.07
FUEL OILS	15.88	16.10	16.28	16.92	17.28	17.98	18.40	18.54	18.38	19.78	21.38	21.70
OTHERS*	27.82	38.02	39.85	40.56	43.78	51.41	53.26	55.40	59.33	62.46	88.28	94.73
TOTAL	**234.93**	**271.45**	**296.45**	**314.31**	**332.80**	**353.20**	**367.66**	**384.86**	**405.61**	**429.19**	**501.86**	**536.01**

(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.

II.3 STATUS OF WELLS (AS ON 1ST 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				
1975	377	7	-	-	5	612	1001
1980	417	10	-	-	6	568	1001
1981	418	9	-	-	6	568	1001
1985	438	4	305	7	7	247	1001
1986	399	2	305	7	6	282	1001
1987	314	2	305	2	8	282	1001
1988	289	2	305	-	7	398	1001
1989	240	1	305	-	10	445	1001
1990	253	1	305	-	7	435	1001
1991	227	1	305	-	6	462	1001
1992	226	1	305	-	5	464	1001
1993	227	1	305	-	6	462	1001
1994	214	1	305	-	6	475	1001
1995	209	1	305	-	6	480	1001
1996	167	1	305	-	2	526	1001
1997	154	1	305	-	-	541	1001
			(B) OIL INDIA LIMITED				
1975	250	18	34	27	20	-	349
1980	273	26	40	48	34	-	421
1981	283	27	42	48	35	-	435
1985	321	42	49	35	50	31	528
1986	327	37	52	12	53	81	562
1987	344	41	56	21	59	74	595
1988	333	44	61	29	62	108	637
1989	337	49	63	38	62	124	673
1990	422	53	66	36	62	70	709
1991	362	59	70	51	44	161	747
1992	365	58	74	68	43	172	780
1993	397	56	81	64	45	166	809
1994	408	58	85	83	49	158	841
1995	418	69	92	79	46	160	864
1996	430	81	98	73	46	164	892
1997	424	90	96	62	48	202	922
			(C) OIL & NATURAL GAS CORPORATION LTD.				
1975	605	79	320	141	28	-	1173
1980	951	123	487	125	32	-	1718
1981	1008	133	508	137	38	-	1824
1985	1434	170	659	216	67	-	2546
1986	1642	190	740	164	80	-	2816
1987	1836	206	804	177	102	-	3125
1988	2024	219	896	20	125	204	3488
1989	2304	239	984	45	144	237	3953
1990	2579	302	1128	69	198	303	4579
1991	2873	330	1281	128	235	94	5087
1992	3007	324	1436	132	337	400	5636
1993	3138	355	1573	148	387	457	6058
1994	3392	380	1702	121	387	554	6636
1995	3488	410	1797	135	534	535	6899
1996	3592	423	1813	120	544	607	7099
1997	3771	447	1924	94	570	643	7449
			TOTAL (A + B + C)				
1975	1282	104	354	168	53	612	2523
1980	1641	159	527	173	72	568	3140
1981	1709	169	550	185	79	568	3260
1985	2186	216	1011	258	124	278	4073
1986	2368	229	1097	183	139	363	4379
1987	2494	249	1165	200	169	444	4721
1988	2646	265	1262	49	194	710	5126
1989	2881	289	1352	83	216	806	5627
1990	3254	356	1499	105	267	808	6289
1991	3462	390	1656	325	285	717	6835
1992	3598	383	1816	200	385	1036	7417
1993	3762	412	1959	212	438	1085	7868
1994	4014	439	2092	204	542	1187	8478
1995	4115	480	2194	214	737	1175	8764
1996	4189	505	2216	193	592	1297	8992
1997	4349	538	2325	156	618	1386	9372

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

II. 4 STATEWISE ACHIEVEMENT OF GEOLOGICAL FIELD PARTIES IN INDIA SINCE INCEPTION UPTO MARCH 1997 (Provisional)

Sl.	STATE	Detailed Mapping (Sq. Km.)	Semideta-iled map. (Sq. Km.)	Travers-int (line Kms.)	Reconnai-ssance (Sq. Km.)	Special studies (Sq. Km.)	Geotectonic studies (Sq. Km.)	Reconnatory traversing (Sq. Km.)
	1	2	3	4	5	6	7	8
1.	Andhra Pradesh	-	5017	-	5295	-	4500	-
2.	Tamil Nadu	2860	6955	271	11160	GC595	-	-
3.	Assam (Including Meghalaya, Nagaland, Mizoram, Tripura, Arunachal Pradesh, Manipur and Nefa)	8005	48974	12616	4979	CW746 Photo-1100 Geological	- 200 (RM)	167
4.	Gujarat	9529	25505	1624	25628	-	-	-
5.	Madhya Pradesh	-	26891	-	-	-	-	-
6.	Bihar	-	5445	93	-	-	-	-
7.	Himachal Pradesh & Punjab	9710	16079	4915	4568	1489	-	330 200 (RM)
8.	Jammu & Kashmir	1764	11527	1923	6548	70 +CH 372	-	-
9.	Uttar Pradesh	4658	12731	2087	913	4170	-	-
10.	Rajasthan	3584	26180	1734	17890	-	-	-
11.	Other areas (Falling in Vindhyan & Gondwana Basin)	-	38095	-	-	-	-	-
12.	West Bengal	912	5390	477	2397	5400	-	-
13.	Andaman & Nicobar	833	4183	647	2151	-	-	-
14.	Nepal	194	8446	1087	-	-	-	-
15.	Bhutan	-	2736	95	270	-	-	-
16.	Maharashtra	-	1240	-	-	-	-	-
	Total	42049	245394	27569	81799	5729 +CW 740 + Photo 1100 geological + GC 595 + CH 372	50400	497 200 (RM)

Abbreviatons : RM-Road-Mapping, CW-Compliation Works.
CM-Checking Lines, GC-Ground Checking.

Note : The figures indicated in this statement as on 31.3.93 are the same as supplied earlier for the period as on 31.3.91 because geological parties after June 90 were assigned R & D work.

II. 5 STATEWISE ACHIEVEMENTS OF GEOPHYSICAL FIELD PARTIES IN INDIA SINCE INCEPTION UPTO MARCH, 1997

(Provisional)

State	Seismic							Geol.
	Departmental Work					Contractual		Dept.
	Single Fold & Refr.Glk	6/12 Fold Till 78-79 Glk	12/24/48 Fold From 79. 80 (SLK)	2D (GLK)	3D SSK	2D Glk	3D SW. KM	SW.KM
Andhra Pradesh	4717	2553	67243	19702	1115	7212		53427
Andaman & Nicobar								7506
Arunachal Pradesh		34	1689			495		3692
Assam	10593	5760	81526	13672	1086	2474		48073
Bihar	2542	219	7380	3684				4035
Gujarat	38164	7368	146138	41402	3441	9037		60625
Himachal Pradesh	1209		7384	1662		259		9530
Haryana	109		1899	929				Covered
Jammu and Kashmir	2062	23	214	34		164		22970
Madhya Pradesh	73		13208	5750		687		44451
Manipur								2781
Meghalaya								1911
Mizoram			173	35				6134
Nagaland		47	2067	467		43		6971
Orissa		313				3814		
Punjab	4078							50362
Rajasthan	2590	945	47408	11703		15811		44691
Sikkim								720
Tamil Nadu	8208	1332	39366	15761	1049	12290		20003
Tripura		68	9222	3456		468		21263
Uttar Pradesh (GV)	8860	1754	31233	17611		4497		29797
West Bengal	8410	6033	19350	9434	270	4758	67	8806
Total	91615	26449	475500	145302	6961	62009	67	447748

Region	Basin	Departmental		Contractual		Multinational	
		2D LK	3D LK	2D LK	3D LK	2D LK	3D LK
BRBC	Bombay Offshore	166605	82408	62856	51443		
	Kerala-Konkan Offshore	97836	9956	3961		12282	
	Kutch Offshore	22211		7722		6819	
	Lakshadweep			3239			
	Saurashtra Offshore	26215		3767		5872	
	Total	312867	92364	81545	51443	24973	0
CRBC	Bengal Offshore			3032		5585	0
	Total	0	0	3032	0	5585	0
SRBC	Andaman Offshore	4110		23246			
	Cauvery Offshore	27063	3239	12096		5839	
	Krishna-Godavari Offshore	21832	4599	18221	3582	8885	
	Total	53005	7838	53563	3582	14724	0
WRBC	Gulf of Cambay	2833		3193			
	Total	2833	0	3193	0	0	0
	Grand Total	368705	100202	141333	55025	45282	0

Remarks: ISSP Work of 7771 LK in Bengal basin not included GV-Ganga Valley.

II. 6 STATEWISE ACHIEVEMENTS OF DRILLING SINCE INCEPTION UPTO MARCH, 1997

(Provisional)

Sl. No.	State	Drilling achievement since inception Wells (Nos.)	Metreage ('000 M)
1	2	3	4
A.	**ON SHORE**		
1.	Andhra Pradesh (Including Kerala)	217	692
2.	Assam, Andaman & Nicobar (Including Meghalaya Arunachal Pradesh, Nagaland, Mizoram, Tripura & West Bengal)	2100	6938
3.	Gujarat (Including Kutch, Maharashtra and Madhya Pradesh)	4200	7274
4.	Bihar	6	29.82
5.	Himachal Pradesh & Punjab	14	53.90
6.	Tamil Nadu & Pondicherry	285	732
7.	Jammu & Kashmir	4	12.02
8.	Orissa	4	8.70
9.	Uttar Pradesh	7	22.58
10.	Rajasthan	39	82
	Total Onland (A)	**6876**	**15845.02**
B.	**Offshore**		
1.	West Coast	1491	3391
2.	East Coast	175	561
	Total Offshore (B)	**1666**	**3952**
	Grand Total (A+B)	**8542**	**19797.02**

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III. 1 STATE WISE RESERVES OF CRUDE OIL @

(Million Tonnes)

Year	On Shore				Off Shore	Grand
	Gujarat	Assam	Rajasthan	Total	Bombay High	Total
1	2	3	4	5	6	7
1966	62.73	90.27	-	153.00	-	153.00
1967	65.88	88.96	-	154.00	-	154.84
1968	64.92	76.08	-	141.00	-	141.00
1969	59.80	72.51	-	132.00	-	132.00
1970	56.38	71.46	-	127.84	-	127.84
1971	51.08	62.70	-	113.78	-	113.78
1972	52.28	72.89	-	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	82.45*	-	135.38	230.95	399.33
1981	51.83	89.00*	-	140.48	328.29	468.77
1982	53.18	91.52*	-	144.70	325.18	469.88
1983	90.53	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	558.01
1987	132.05	119.03*	-	251.08	330.35	581.43
1988	143.02	124.38*	-	267.40	371.04	638.44
1989	155.12	140.24*	-	295.36	430.86	726.22
1990	161.69	144.97	-	306.66	432.14	738.80
1991	158.26	156.22*	-	314.48	491.67	806.15
1992	156.55	160.82*	-	317.37	483.68+	801.05
1993	155.09	158.16*	-	313.25	465.81+	779.06
1994	153.40	156.06*	-	309.46	455.17+	764.63
1995	153.20	147.87*	-	301.07	431.08+	732.15
1996	152.08	152.14*	-	304.22	422.28+	726.50

@ Proved & Indicated Balance Recoverable Reserves.

* Includes crude oil reserves in Nagaland, Tamil Nadu, Andhra Pradesh and Arunachal Pradesh.

\+ Includes reserves in Andhra Pradesh, Tamil Nadu and JVC.

Note: For AOC & OIL the figures relate to Ist January of each year but in case of OnGC the data pertains to Ist October upto the year 1974 and thereafter to Ist January of each year upto the year 1992 and from1993 relates to Ist April.

2649/P&NG/F—4-B

III.2 COMPANY-WISE PRODUCTION OF CRUDE OIL IN INDIA
(CALENDAR YEARS)

(000 Tonnes)

Year	On Shore					Off Shore		Grand	Cumulative
	AOC	OIL	JVC	ONGC	Total	ONGC	JVC	Total	Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Up to 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	10747
1961	184	319	-	10	513	-	-	513	10747
1962	188	556	-	334	1078	-	-	1078	11825
1963	184	804	-	663	1652	-	-	1652	13477
1964	170	1274	-	768	2212	-	-	2212	15689
1965	158	1742	-	1122	3022	-	-	3022	18711
1966	149	2143	-	2355	4647	-	-	4547	23358
1967	134	2752	-	2781	5667	-	-	5667	29025
1968	117	2771	-	2965	5853	-	-	5853	34878
1969	112	3074	-	3537	6723	-	-	6723	41601
1970	107	3074	-	3632	6809	-	-	6809	48410
1971	98	3164	-	3941	7185	-	-	7185	55595
1972	93	3183	-	4087	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	-	-	8431	85939
1977	58	3120	-	5569	8747	1438	-	10185	104783
1978	55	2698	-	5551	8303	2968	-	11271	116054
1979	47	2848	-	5537	8432	4407	-	12839	128893
1980	41	796	-	4033	4870	4529	-	9299	138292
1981	(a)33	2803	-	5083	7919	7006	-	14925	153127
1982	-	2963	-	5304	8267	11467	-	19734	172951
1983	-	2794	-	6501	8395	16753	-	25148	198099
1984	-	2794	-	6501	8395	16753	-	25148	198099
1985	-	2635		6580	9215	20645	-	29860	255892
1986	-	2713	-	7150	9863	21294	-	31157	287049
1987	-	2408	-	7626	10034	20108	-	30142	317191
1988	-	2439	-	8150	10589	20991	-	31580	348771
1989	-	2612	-	9445	12057	21628	-	33685	382456
1990	-	2697	-	9294	11991	21320	-	33311	415767
1991	-	2580	-	9033	11613	19394	-	31007	446774
1992	-	2486	-	8779	11265	16609	-	27874	474648
1993	-	2738	-	8688	11426	15082	-	26508	501156
1994	-	2898	-	9107	12005	18900	-	30905	532061
1995	-	2867	17	9050	11934	22656	458	35048	567109
1996	-	2858	36	8640	11534	20526	926	32986	600095

(a) = 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 October, 1981, thereafter the same have been merged with Oil.

III. 3 COMPANY WISE PRODUCTION OF CRUDE OIL IN INDIA
(Financial Year)

Year	On Shore					Off Shore		Grand	Cumulative
	AOC	OIL	ONGC	JVC	Total	JVC	ONGC	Total	Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1970-71	104	3084	3684	-	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)	995	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
1986-87	-	2621	7241	-	9862	-	20618	30480	294726
1987-88	-	2448	7745	-	10193	-	20164	30357	325083
1988-89	-	2425	8503	-	10928	-	21112	32040	357123
1989-90	-	2704	9667	-	12371	-	21716	34087	391210
1990-91	-	2649	9181	-	11830	-	21191	33021	424231
1991-92	-	2529	8854	-	11383	-	18963	30346	454577
1992-93	-	2523	8681	-	11204	-	15746	26950	481527
1993-94	-	2811	8840	-	11651	-	15375	27026	508553
1994-95	-	2883	9130	-	12013	-	20226	32239	540792
1995-96	-	2882	8971	26	11879	624	22665	35168	575960
1996-97*	-	2870	8504	38	11412	1307	20181	32900	608860

*Provisional.

(e)= After takeover of AOC by Government in October 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.

III.4 STATE-WISE PRODUCTION OF CRUDE IN INDIA

(000 Tonnes)

YEAR	ON SHORE					OFF SHORE		
	Arunachal Pradesh	Tamil Nadu/ Andhra Pradesh	Assam/ Nagaland	Gujarat	Total	Andhra Pradesh	Bombay High	Grand Total
A. CALENDAR YEARS								
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	—	4679	4576	9215		20645	29860
1986	59	4	5270	4530	9863		21294	31157
1987	40	9	5138	4847	10034		20108	30142
1988	32	23	5309	5225	10589		20991	31580
1989	39	152	5771	6095	12057		21628	33685
1990	41	313	5199	6440	11991		21320	33311
1991	41	311	5097	6162	11613		19393	31006
1992	55	331	4964	5915	11265		16609	27874
1993	55	481	5039	5851	11426		15082	26508
1994	37	639	5108	6222	12006		18900	30906
1995	27	491	5038	6318	11934	458	22656	35048
1996	36	390	4834	6278	11538	925	20526	52989
B. FINANCIAL YEAR								
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
1986-87	51	5	5239	4561	9862		20618	30480
1987-88	36	14	5154	4989	10193		20164	30357
1988-89	35	31	5457	5405	10928		21112	32040
1989-90	38	208	5812	6313	12371		21716	34087
1990-91	43	313	5076	6398	11830		21191	33021
1991-92	42	318	4988	6035	11383		18963	30346
1992-93	59	352	4986	5807	11204		15746	26950
1993-94	49	536	5090	5076	11651		15375	27026
1994-95	35	656	5043	6279	12013		20226	22239
1995-96	28	418	5046	6386	11878	824	22665	35167
1996-97	36	381	5192	6184	11793	1307	20181	33281

IV.1 STATE-WISE RESERVES OF NATURAL GAS

(Bn. Cubic Metres)

Year	ON SHORE				OFF SHORE	Grand
	Gujarat	Assam	Rajasthan	Total	Bombay High	Total
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	-	63.60
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	-	67.88
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	63.25*	0.43	80.95	270.96	351.91
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	478.26
1984	18.60	81.31*	0.54	100.54	368.55*	478.63
1985	21.87	87.67*	0.54	110.08	368.55*	478.63
1986	26.99	91.83*	0.54	119.36	377.79	497.05
1987	41.26	97.82*	0.74	139.82	400.99	540.81
1988	62.11	105.49*	0.78	168.38	411.09	579.47
1989	85.59	120.49	1.00	207.08	440.47	647.55
1990	92.58	135.47*	1.04	229.09	457.36	686.45
1991	93.39	151.68*	1.22	246.29	483.29	729.79
1992	93.97	160.45*	1.27	255.69	479.77*	735.46
1993	92.87	156.13*	3.82	252.82	465.13 **	717.95
1994	92.13	156.18*	3.82	252.13	454.56 **	706.69
1995	89.88	159.18*	4.11	253.17	406.47 **	659.64
1996	87.95	173.66	1.36	262.97	377.17	640.14

@ Proved & Indicated Balance Recoverable Reserves.

* Includes Natural Gas Reserves in Tripura, Nagaland, Tamil Nadu, Arunachal Pradesh & Andhra Pradesh.

** Including natural gas reserve in Andhra Pradesh, Gujarat, Tamil Nadu, Andaman and JVC

Note: For AOC & OIL the figures relate to 1st January of each year but in case of ONGC the data perains to 1st October upto the year 1974 and thereafter to 1st January of each year upto the year 1992 and from 1993 relates to 1st April.

IV.2 STATE-WISE GROSS PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

Year	ON SHORE					OFFSHORE	Grand
	Gujarat	Assam/ Nagaland	Arunachal Pradesh	Tripura/ T. Nadu & Andhra Pradesh	Total	Bombay High	Total
1	2	3	4	5	6	7	8
A. Calendar Years							
1970	458	996	-	-	1424	-	1424
1971	526	993	-	-	1509	-	1509
1972	533	1031	-	-	1564	-	1564
1973	519	1155	-	-	1674	-	1674
1974	590	1328	-	-	1918	-	1918
1975	760	1550	-	-	2310	-	2310
1976	815	1595	-	-	2410	28	2438
1977	888	1677	-	-	2565	161	2726
1978	903	1527	-	-	2430	340	2770
1979	843	1709	-	-	2552	532	3084
1980	868	621	-	-	1489	588	2077
1981	761	1605	-	-	2366	1120	3486
1982	741	1855	-	-	2596	2065	4661
1983	760	1903	1	-	2664	3104	5768
1984	758	2027	1	-	2786	4034	6820
1985	884	2049	4	-	2937	4971	7908
1986	980	2105	12	17	3114	6350	9464
1987	940	2149	13	33	3135	7771	10906
1988	1183	2150	17	53	3403	9381	12784
1989	1559	2172	21	77	3829	12097	15926
1990	1645	2014	27	158	3844	14146	17990
1991	1855	2062	31	251	4199	14450	18649
1992	1957	2054	49	563	4623	13749	18372
1993	2080	1984	49	779	4892	13229	18121
1994	2395	1937	39	829	5200	14223	19423
1995	2791	1861	33	906	5591	15533	21124
1996	2916	1951	25	987	5879	17042	22921
B. Financial Year							
1970-71	465	980	-	-	1445	-	1445
1971-72	523	1012	-	-	1535	-	1535
1972-73	531	1034	-	-	1565	-	1565
1973-74	518	1195	-	-	1713	-	1713
1974-75	653	1388	-	-	2041	-	2041
1975-76	773	1595	-	-	2368	-	2368
1976-77	822	1558	-	-	2380	48	2428
1977-78	893	1717	-	-	2610	229	2839
1978-79	908	1518	-	-	2426	386	2812
1979-80	840	1385	-	-	2225	542	2767
1980-81	842	843	-	-	1685	673	2358
1981-82	758	1748	-	-	2506	1345	3851
1982-83	750	1829	-	-	2579	2357	4936
1983-84	748	1954	Neg.	-	2833	4408	7241
1984-85	775	2056	2	-	2833	4408	7241
1985-86	919	2029	6	-	2954	5180	8134
1986-87	971	2142	13	22	3184	6705	9853
1987-88	1005	2147	13	43	3208	8259	11467
1988-89	1258	2160	18	50	3486	9731	13217
1990-91	1696	2011	29	180	3916	14082	17998
1991-92	1698	2051	31	271	4251	14394	18645
1992-93	1946	2034	52	676	4708	13352	18060
1993-94	2166	1978	47	788	4979	13354	18335
1994-95	2462	1909	37	835	5243	14138	19381
1995-96	2878	1893	32	926	5729	16579	22308
1996-97*	2941	1990	23	1045	5999	16794	22793

*Provisional.

IV. 3 STATE-WISE GROSS AND NET PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

Period	Gross Prodn.	Reinjected	Flarred	Net Production
1	2	3	4	5
		ONSHORE		
GUJARAT				
1970-71	465	-	155	310
1975-76	773	-	136	637
1980-81	842	-	146	696
1981-82	758	-	77	681
1982-83	750	-	55	695
1983-84	750	-	67	681
1984-85	775	-	85	690
1985-86	919	-	118	801
1986-87	971	-	184	787
1987-88	1005	-	268	900
1988-89	1258	-	358	1135
1989-90	1613	-	478	1294
1990-91	1696	-	402	1294
1991-92	1898	-	318	1580
1992-93	2166	-	229	1717
1993-94	2166	-	257	1909
1994-95*	2462	-	280	2182
1995-96	2878	-	279	2599
1996-97*	2941	-	327	2614
ASSAM $				
1970-71	980	36	607	337
1975-76	1595	162	946	487
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
1986-87	2155	63	866	1226
1987-88	2160	54	727	1379
1988-89	2178	84	730	1364
1989-90	2182	96	689	1397
1990-91	2040	102	621	1317
1991-92	2083	132	703	1247
1992-93	2086	90	685	1311
1993-94	2025	71	710	1244
1994-95*	1946	23	596	1327
1995-96	1924	17	403	1504
1996-97	2013	-	391	1622
TRIPURA				
1985-86				
1986-87				
1987-88				
1988-89	26	-	-	26
1989-90	25	-	-	25
1990-91	70	-	-	70
1991-92	80	-	-	80
1992-93	115	-	-	115
1993-94	102	-	-	102
1994-95	97	-	-	97
1995-96	130	-	-	130
1996-97*	154	-	-	154

$: Includes Nagaland and Arunachal Pradesh.
*: Provisional

contd.....

IV.3 STATE-WISE GROSS AND NET PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

Period	Gross Prodn.	Re-Injected	Flarred	Net Production
1	2	3	4	5
ANDHRA PRADESH				
1985-86	–	–	–	
1986-87	-	-	-	
1987-88	-	-	-	
1988-89	14	-	-	14
1989-90	26	-	Neg.	26
1990-91	46	-	5	41
1991-92	150	-	6	144
1992-93	507	-	6	501
1993-94	610	-	17	593
1995-96	679	-	-	679
1996-97*	799	-	-	799
TAMIL NADU				
1985-86	-	-	-	-
1986-87	22	-	5	17
1987-88	43	-	11	32
1988-89	10	-	8	2
1989-90	55	-	51	4
1990-91	64	-	55	9
1991-92	41	-	29	12
1992-93	54	-	35	19
1993-94	76	-	56	20
1994-95	98	-	82	16
1995-96	117	-	96	21
1996-97*	92	-	49	43
TOTAL ONSHORE				
1970-71	1445	36	762	647
1975-76	2368	162	1082	1124
1976-77	2380	190	809	1381
1980-81	1685	67	403	1215
1981-82	2506	110	845	1591
1982-83	2579	91	931	1557
1983-84	2702	45	1092	1565
1984-85	2833	48	1159	1626
1985-86	2954	66	1005	1883
1986-87	3148	63	1055	2030
1987-88	3208	54	1006	2148
1988-89	3486	84	1096	2306
1989-90	3901	96	1218	2587
1990-91	3916	102	1083	2731
1991-92	4708	90	955	3773
1992-93	4979	71	1040	3868
1993-94	4979	71	1049	3868
1994-95	5243	23	980	4240
1995-96	5728	17	778	4933
1996-97*	5999	-	667	5332

*: Provisional

Contd....

IV. 3 STATE-WISE GROSS AND NET PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

Period	Gross Prodn.	Re-Injected	Flarred	Net Production
1	2	3	4	5
OFFSHORE				
1970-71				
1975-76				
1976-77	48	-	48	
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	3064
1986-87	6705	-	1663	5042
1987-88	8259	-	2439	5820
1988-89	9731	-	2787	6944
1989-90	13087	-	4502	8585
1990-91	14082	-	4047	10035
1991-92	14394	-	3016	11378
1992-93	13352	-	899	12453
1993-94	13356	-	884	12472
1994-95	14138	-	1040	13098
1995-96	14138	-	613	15966
1996-97*	16794	-	819	15975
GRAND TOTAL				
1970-71	1445	36	762	647
1975-76	2368	162	1082	1124
1976-77	2428	190	857	1381
1980-81	2358	67	769	1522
1982-83	3851	110	1519	2222
1983-84	5961	45	2517	3399
1984-85	7241	48	3052	4141
1985-86	8134	66	3118	4950
1986-87	9853	63	2718	7072
1987-88	11467	54	3445	7968
1988-89	13217	84	3883	9250
1990-91	17998	102	5130	12766
1991-92	18645	132	4072	14441
1992-93	18060	90	1854	16116
1993-94	18335	71	1924	16340
1994-95	19381	23	2020	17339
1995-96	22307	17	1391	20899
1996-97*	22793	-	1486	21307

*Provisional

IV. 4 STATE-WISE UTILISATION NATURAL GAS IN INDIA

(Mn. Cubic Metres)

Year	ON SHORE							OFFSHORE	Grand
	Gujarat	Assam**	Tripura	Andhra Pradesh	Rajasthan	Tamil Nadu	Total	Bombay High	Total
1	2	3	4	5	6	7	8	9	10
1970-71	310	337	-	-		-	647	-	647
1971-71	380	338	-	-		-	718	-	718
1971-72	414	357	-	-		-	414	-	357
1972-73	374	388	-	-		-	762	-	762
1973-74	374	388	-	-		-	762	-	762
1974-75	532	419	-	-		-	951	-	951
1975-96	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	801	1082	-	-		-	1626	2516	4141
1985-86	801	1082	-	-		-	1883	3067	4950
1986-87	787	1226	-	-		17	2030	5042	7072
1987-88	737	1379	-	-		32	2148	5820	7968
1988-89	900	1364	26	14		2	2306	6944	9250
1898-90	1135	1394	25	26		4	2587	8585	11172
1991-92	1580	1247	80	144		12	3063	11378	14441
1992-93	1717	1311	115	501		19	3663	12453	16116
1993-94	1717	1311	115	501		19	3663	12453	16116
1993-94	1909	1244	102	593		20	3868	12472	16340
1994-95	2182	1328	97	617		16	4240	13097	17337
1995-96	2599	1510	130	678	12	21	4950	15966	20916
1996-97	2614	1722	154	799	10	43	5332	15975	21307

* Provisional
** Includes Nagaland and Arunachal Pradesh.

IV.5 INDUSTRY-WISE OFFTAKES OF NATURAL GAS IN INDIA

(Million Cubic Metres)

Year	Energy Purpose						Non Energy Purposes				
	Power Generation	Industrial fuel	Tea Plantation	Domestic fuel	Captive Use/LPG Shrinkage	Total	Fertilizer	Petro-Chemicals	Others	Total	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
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	-	-	187	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	158	39	18	174	896	755	7	18	780	1676
1980-81	492	168	45	14	176	890	611	5	16	632	1522
1981-82	612	166	47	15	364	1204	991	8	19	1018	2222
1982-83	1025	185	51	14	499	1774	1155	7	21	1183	2957
1983-84	1209	230	56	16	572	2083	1283	10	23	1316	3399
1984-85	1454	250	62	18	721	2505	1603	10	23	1636	4141
1985-86	1299	223	78	21	795	2416	2500	10	24	2534	4950
1986-87	2041	257	98	25	1295	3711	3335	-	26	3361	7072
1987-88	2721	281	99	34	1313	4448	3490	-	30	3520	7968
1988-89	1823	526	87	42	1329	3807	5334	21	88	5443	9250
1989-90	2140	695	78	41	1526	4480	6578	29	85	6692	11172
1990-91	3634	827	89	50	1775	6375	5612	409	370	6391	12766
1991-92	4967	1450	105	187	1916	8625	6672	578	241	7491	16116
1993-94	4785	1794	121	189	2277	9166	6499	494	181	7174	16340
1994-95	5229	1927	134	190	2230	9710	6936	520	171	7627	17337
1995-96	6836	2301	111	178	589	10015	7602	474	-	8076	18091
1996-97*	6935	2631	130	184	618	10498	7625	509	-	8134	18632

* = Provisional Neg. = Negligible

V.I PETROLEUM REFINING CAPACITY IN INDIA AS ON 1.4.1997

(Million Tonnes Per Annum)

Sl.No.	Refinery	Year of Commissioning	Installed Capacity as on 1.4.1997	Capacity after expansion under consideration/Implementaiton
1	2	3	4	
	A. Refineries in Operation:			
1.	IOC, Digboi	1901	0.65	
2.	BPCL, Bombay	1955	6.00	
3.	HPCL, Bombay	1954	5.50	
4.	HPCL, Visakh	1957	4.50	
5.	IOC, Guwahati	1962	1.00	
6.	IOC, Barauni	1964	3.30	
7.	IOC, Gujarat	1965	9.50	
8.	IOC, Haldia	1974	3.75	
9.	IOC, Mathura	1982	7.50	
10.	CRL, Cochin	1966	7.50	
11.	MRL, Madras	1969	6.50	
12.	BR & PL, Assam	1979	2.35	
13.	MRL, Narimanam	1993	0.50	
14.	MR & PL Mangalore	1996	3.00	
	Total (A)		61.55	
	B. Refinery Projects under Implementation			
15.	Panipat			6.00
16.	Assam (Numaligarh)			3.00

V.2a REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS DURING 1961 TO 1996

('000' Tonnes)

Year	Crude Throughput			Production		
	Public Sector	Private Sector/JVC	Total (2+3)	Public Sector	Private Sector/JVC	Total (5+6)
1	2	3	4	5	6	7
			CALENDAR YEARS			
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	10143	7040	17172
1971	11198	8390	19588	10293	7932	18225
1972	11838	7834	19682	10935	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
1986	44940	-	44940	41877	-	41877
1987	47445	-	47445	44583	-	44583
1988	47896	-	47896	44730	-	44730
1989	51974	-	51974	48724	-	48724
1990	51671	-	51671	48402	-	48402
1991	50954	-	50954	47916	-	47916
1992	54254	-	54254	51041	-	51041
1993	53509	-	53509	50396	-	50396
1994	56407	-	56407	52872	-	52872
1995	57971	-	57971	54379	-	54379
1996*	59688	2016	61704	56117	1752	57869

*Provisional.

V. 2b REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS DURING 1961-62 TO 1996-97

('000' Tonnes)

Year	Crude Throughput			Production		
	Public Sector	Private Sector/JVC	Total (2+3)	Public Sector	Private Sector/JVC	Total (5+6)
1	2	3	4	5	6	7
			FINANCIAL YEARS			
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	17838
1973-74	11616	9342	20958	10647	8848	19495
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
1986-87	45699	-	45699	42761	-	42761
1987-88	47754	-	47754	44729	-	44728
1988-89	48803	-	48803	45699	-	45699
1989-90	51942	-	51942	51942	-	49690
1990-91	51772	-	51772	48562	-	48562
1991-92	51423	-	51423	48349	-	48349
1992-93	53482	-	53482	50359	-	50359
1993-94	54296	-	54296	51084	-	51084
1994-95	56534	-	56534	52927	-	52927
1995-96	58702	39	58741	55058	23	55081
1996-97*	59959	2911	62870	56370	2635	59005

*:Provisional

V. 3 REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION OF PETROLEUM PRODUCTS DURING 1980-81 TO 1996-97

('000' Tonnes)

Year	IOC AOD	BPCL MUMBAI	HPCL MUMBAI	HPCL VISAKH	IOC Guwahati	IOC Barauni
1	2	3	4	5	6	7
1980-81:						
Total Production	477	4629	2907	1208	577	432
Crude Run	503	4901	3113	1319	639	504
1982-83:						
Total Production	501	4272	2926	1004	733	2861
Crude Run	521	4485	3124	1077	802	3071
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
1986-87:						
Total Production	530	5277	4752	3452	738	2604
Crude Run	551	5580	5011	3715	802	2638
1987-88:						
Total Production	468	6178	5170	3351	770	2394
Crude Run	547	6539	5456	3621	815	2638
1988-89:						
Total Production	558	5811	5243	3514	675	2591
Crude Run	574	6132	5506	3762	762	2815
1989-90:						
Total Production	544	6828	5520	3976	801	2709
Crude Run	570	7037	5755	4280	856	2964
1990-91:						
Total Production	540	6603	5506	3231	712	2206
Crude Run	566	6957	5766	3464	783	2416
1991-92:						
Total Production	524	6630	4496	3676	793	2060
Crude Run	546	6940	4729	3920	856	2262
1992-93:						
Total Production	623	6875	5619	4274	749	2097
Crude Run	547	7233	5849	4527	815	2287
1993-94:						
Total Production	535	6831	5774	4203	840	2051
Crude Run	554	7203	6018	4448	910	2222
1994-95:						
Total Production	509	7071	4913	4759	833	2039
Crude Run	536	7506	5234	5014	884	2220
1995-96:						
Total Production	537	7065	5674	4753	781	2129
Crude Run	559	7460	5966	5037	839	2322
1996-97:						
Total Production	453	7279	6238	4576	778	1720
Crude Run	477	7640	6534	4847	848	1895

Contd....

V. 3 Contd. REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION OF PETROLEUM PRODUCTS DURING 1980-81 TO 1996-97

('000' Tonnes)

Year	IOC Gujrat	IOC Haldia	IOC Mathura	CRL Cochin	MRL Madras	MRL Narimanam	BRPL Assam	MRPL Mangalore	Total
1	8	9	10	11	12	13	14	15	16
1980-81:									
Total Production	6629	2056	-	2795	2376	-	37	-	24123
Crude Run	6974	2308	-	2912	2611	-	52	-	25836
1982-83:									
Total Production	6667	2301	3610	3048	2735	-	515	-	31073
Crude Run	7089	2503	3844	3187	2857	-	596	-	33156
1984-85:									
Total Production	7290	2101	5909	826	3139	-	630	-	33236
Crude Run	7777	2365	6239	872	3413	-	752	-	35556
1985-86:									
Total Production	7305	2579	5734	2560	4723	-	739	-	39881
Crude Run	7830	2822	6075	2749	5057	-	893	-	42910
1986-87:									
Total Production	7384	2390	6006	3954	4842	-	847	-	42776
Crude Run	7835	2623	6353	4166	5192	-	1011	-	45699
1987-88:									
Total Production	7936	2527	6202	3946	4651	-	941	-	44634
Crude Run	8444	2808	6535	4111	5131	-	1109	-	47754
1988-89:									
Total Production	8071	2405	6162	4545	5155	-	969	-	45699
Crude Run	8656	2636	6557	4761	5476	-	1166	-	48803
1989-90:									
Total Production	8544	2609	6814	4344	5096	-	1005	-	48690
Crude Run	9109	2824	7208	5006	5698	-	1139	-	51772
1990-91:									
Total Production	8791	2608	7414	4715	5279	-	957	-	48562
Crude Run	9334	2935	7808	5006	5698	-	1139	-	51772
1991-92:									
Total Production	8877	2791	7925	4554	5147	-	976	-	48349
Crude Run	9379	3021	8231	4846	5529	-	1164	-	51423
1992-93:									
Total Production	9258	2810	7430	4853	4927	-	944	-	50359
Crude Run	9780	3040	7843	5122	5323	-	1116	-	53482
1993-94:									
Total Production	8830	2878	8121	4568	5313	120	1020	-	51084
Crude Run	9434	3106	8518	4862	5728	126	1167	-	54296
1994-95:									
Total Production	9148	2998	8018	4803	6461	370	1005	-	52927
Crude Run	9888	3258	8377	5135	6921	382	1179	-	56534
1995-96:									
Total Production	9476	3168	7934	7010	5162	358	1011	23	55081
Crude Run	10167	3416	8332	7421	5599	370	1215	39	58741
1996-97:*									
Total Production	9722	3189	7744	6890	6143	332	1306	2635	59005
Crude Run	10352	3451	8113	7293	6621	345	1542	2912	62870

*. Provisional.

2649/P&NG/F—5-A

V. 4 TRENDS IN DOMESTIC PRODUCTION OF PETROLEUM PRODUCTS DURING THE YEARS 1983-84 TO 1996-97

(Qty. '000' Tonnes)

	Products	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97*
	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Light Distillates:	8253	9069	9245	9451	10021	10023	9673	9966	10118	11625	12433	12883
	of which												
	LPG @	867	995	1026	1034	1179	1221	1250	1249	1314	1432	1539	1598
	MS	2306	2515	2662	2822	3328	3552	3420	3709	3843	4129	4462	4704
	Naphtha	4955	5437	5362	5378	5227	4859	4546	4586	4666	5662	5975	6123
2.	Middle Distillates:	21613	23324	24563	25362	26867	26344	26371	27004	27799	28695	29941	32423
	of which												
	Kerosene	4030	4912	5104	5201	5700	5471	5339	5199	5270	5261	5267	6236
	ATF/RTF/Jet A-1	1519	1553	1695	1753	1575	1801	1539	1636	1788	1968	2127	2119
	HSD	14624	15450	16296	16656	17737	17185	17404	18289	18809	19593	20661	22202
	LDO	1177	1172	1259	1468	1540	1509	1482	1453	1474	1364	1351	1286
3.	Heavy Ends:	10015	10368	10870	10886	11802	12195	12305	13389	13167	12607	12707	13698
	of which												
	F.O.	3791	3865	4563	4243	4543	4879	5430	6359	6163	5728	5351	5980
	LSHS/HHS/RFO	4164	4146	3903	3928	4409	4550	4207	4044	4141	4094	4228	4318
	Total Fuel Oils	7955	8011	8466	8171	8952	9429	9637	10403	10304	9822	9579	10298
	Lube Oils	501	491	478	497	547	561	390	533	489	504	633	619
	Bitumen	1107	1224	1370	1548	1671	1603	1710	1862	1874	1845	2032	2283
	Petroleum Coke	192	264	257	275	275	229	216	221	233	259	256	246
	Paraffin wax						49	44	47	45	43	43	31
	Other Waxes						46	46	51	47	58	63	56
	TOTAL PRODUCTION:	39881	42761	44728	45699	48690	48562	48349	50359	51084	52927	55081	59005
	Crude throughout	42910	45699	47754	48803	51523	51772	51423	53482	54296	56534	58741	62870
	LPG Production												
	from Natural Gas	363	494	558	726	769	929	1235	1323	1385	1426	1714	1780
	NGL Production	83	186	264	414	589	606	992	1245	1331	1250	1494	1543

@ :Exlcudes LPG production from Natural Gas. *: Provisional.

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V. 5a PRODUCTION OF PETROLEUM PRODUCTS-1989 TO 1996

('000' Tonnes)

Product	Production								% Variation	
	1989	1990	1991	1992	1993	1994	1995	1996	1995 1994	1996* 1995
1	2	3	4	5	6	7	8	9	10	11
1. Light Distillates:	**10086**	**9846**	**9544**	**10171**	**9930**	**11326**	**12258**	**12815**	**8.2**	**4.5**
of which										
LPG@	1163	1215	1229	1254	1295	1394	1533	1566	10.0	2.2
MS	3242	3536	3453	3646	3803	4097	4367	4597	6.6	5.3
Naphtha	5422	4730	4423	4786	4533	5466	5924	6157	8.4	3.9
SBPS/Hexane	85	122	133	135	123	121	132	165	9.1	25.0
2. Middle Distillates:	**26949**	**26503**	**26295**	**27354**	**27156**	**28788**	**29560**	**31661**	**2.7**	**7.1**
of which										
Kerosene	5507	5686	5270	5331	5289	5206	5315	5969	2.1	12.3
ATF/JetA-1RTF	1654	1649	1656	1626	1706	1992	2026	2165	1.7	6.9
H.S.D.	17979	17121	17259	18482	18289	19676	20348	21643	3.4	6.4
L.D.O.	1512	1525	1499	1514	1412	1419	1364	1288	-3.9	-5.6
J.B.O.	77	80	83	68	77	82	92	96	12.2	4.3
M.T.O.	130	136	148	132	142	157	169	210	7.6	24.3
3. Heavy Ends:	**11689**	**12053**	**12076**	**13516**	**13319**	**12758**	**12561**	**13393**	**-1.5**	**6.6**
of which										
F.O.	4491	4856	4982	6524	6289	5798	5512	5728	-4.9	3.9
LSHS/HHS/FRO	4395	4454	4434	4051	4152	4062	4092	4360	0.7	6.5
Total Fuel Oils	8886	9310	9416	10575	10441	9860	9604	10088	-2.6	5.0
Lube Oils	556	548	410	503	515	529	582	601	10.0	3.3
Bitumen	1595	1598	1676	1836	1844	1904	1922	2229	0.9	16.0
Pet. Coke	277	246	229	223	216	258	259	243	0.4	-6.2
Paraffin wax	—	49	45	47	45	43	43	33	0.0	-23.3
Other waxes		44	44	56	45	59	61	51	3.4	-16.4
Total waxes	95	93	89	103	90	102	104	84	2.0	-19.2
4. Total Production	**48724**	**48402**	**47916**	**51041**	**50405**	**52872**	**54379**	**57869**	**2.9**	**6.4**
5. Crude Run	**51974**	**51671**	**50954**	**54254**	**53516**	**56407**	**57971**	**61704**	**2.8**	**6.4**
				(b) From Natural Gas						
6. L.P.G.	764	860	1173	1312	1367	1408	1599	1811	13.6	13.3
7. N.G.L.	518	621	940	1009	1076	900	1103	1543	22.6	39.9

$Includes Calcined Pet. Coke@: Excludes LPG production from Natural Gas.

PATTERN OF PRODUCTION (PERCENTAGE)

PRODUCTS	1989	1990	1991	1992	1993	1994	1995	1996*
Light Distillates	19.4	19.1	18.7	18.7	18.6	20.1	21.1	20.8
Middle Distillates	51.8	51.3	51.6	50.4	50.7	51.0	51.0	51.3
Total Fuel Oils	17.1	18.0	18.5	19.5	19.5	17.5	16.6	16.3
Lubes	1.1	1.1	0.8	0.9	1.0	0.9	1.0	1.0
Bitumen	3.1	3.1	3.3	3.4	3.4	3.4	3.3	3.6
Others	1.2	1.1	1.1	1.2	1.0	0.8	0.8	0.8
Total Production	93.7	93.7	94.0	94.1	94.2	93.7	93.8	93.8
RBF & Losses/Inventories	6.3	6.3	6.0	5.9	5.8	6.3	6.2	6.2
Crude Run	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Provisional

V.5b PRODUCTION OF PETROLEUM PRODUCTS 1989-90 TO 1996-97

('000' Tonnes)

PRODUCT	PRODUCTION								% VARIATION	
	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97*	1995-96 1994-95	1996-97 1995-96
1	2	3	4	5	6	7	8	9	10	11
				(A) From Crude Oil						
1. Light Distillates:	10021	10023	9673	9966	10118	11625	12433	12883	7.0	3.6
of which										
L.P.G.@	1179	1221	1250	1249	1314	1432	1539	1598	7.5	3.8
MS	3328	3552	3420	3709	3843	4129	4462	4704	8.1	5.4
Naphtha	5227	4859	4546	4586	4666	5662	5975	6123	5.5	2.5
SBPS/Hexane	96	125	135	129	120	118	150	157	27.1	4.7
2. Middle Distillates	25867	26344	26371	27004	27799	28695	29941	32423	4.3	8.3
of which										
Kerosene	5700	5471	5339	5199	5270	5261	5267	6236	0.1	18.4
ATF/Jet A-1/RTF	1575	1801	1539	1636	1788	1968	2127	2119	8.1	-0.4
H.S.D.	17737	17185	17404	18289	18809	19593	20661	22202	5.5	7.5
L.D.O.	1540	1509	1482	1453	1474	1364	1351	1266	-1.0	-4.8
J.B.O.	74	82	82	72	74	87	95	96	9.2	1.1
M.T.O.	128	146	143	133	145	156	180	204	15.4	13.3
3. Heavy Ends:	11802	12195	12305	13389	13167	12607	12707	13698	0.8	7.8
of which										
F.O.	4543	4879	5430	6358	6163	5728	5351	5980	-6.6	11.8
LSHS/HHS/RFO	4409	4550	4207	4044	4141	4094	4228	4318	3.3	2.1
Total Fuel Oils	8952	9429	9637	10402	10304	9822	9579	10298	-2.5	7.5
Lube Oils	547	561	390	533	489	504	633	619	25.6	-2.2
Bitumen	1671	1603	1710	1862	1874	1845	2032	2283	10.1	12.4
Pet. Coke$	275	229	216	221	233	259	256	246	-1.2	-3.9
Paraffin wax		49	44	47	45	43	43	31	0.0	-27.9
Other waxes		46	46	51	47	58	63	56	8.6	-11.1
Total waxes	95	95	90	98	92	101	106	87	5.0	-17.9
4. Total Production	48690	48562	48349	50359	51084	52927	55081	59005	4.1	7.1
5. Crude Run	51942	51772	51423	53482	54296	56534	58741	62870	3.9	7.0
				(b) From Natural Gas						
6. L.P.G.	769	929	1235	1323	1385	1426	1714	1780	20.2	3.9
7. N.G.L.	589	606	992	1245	1331	1250	1494	1543	19.5	3.3

@: Excludes LPG Production from Natural Gas
$: Includes calcined pet. coke.

PATTERN OF PRODUCTION (PERCENTAGE)

PRODUCTION	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97*
Light Distillates	19.3	19.4	18.8	18.6	18.6	20.5	21.2	20.5
Middle Distillates	51.7	51.9	51.3	50.5	51.2	50.7	51.0	51.6
Total Fuel oils	17.2	18.2	18.7	19.4	19.0	17.4	16.3	16.4
Lubes	1.1	1.1	0.8	1.0	0.9	0.9	1.1	1.0
Bitumen	3.2	3.1	3.3	3.5	3.5	3.3	3.4	3.6
Others	1.2	1.1	1.1	1.2	0.9	0.8	0.8	0.8
Total Production	93.7	93.8	94.0	94.2	94.1	93.6	93.8	93.9
RBF & Losses/Inventories	6.3	6.2	6.0	5.8	5.9	6.4	6.2	6.1
Crude Run	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*: Provisional.

VI. 1 TRENDS IN SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE PERIOD 1981-82 TO 1996-97

(000' Tonnes)

PRODUCTS	1981-82	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	% share of Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Light Distillates:	**5187**	**6776**	**7412**	**7547**	**8619**	**9412**	**9801**	**10115**	**10310**	**10570**	**11637**	**13143**	**14384**	**17.8**
of which														
LPG	492	1241	1497	1686	1962	2268	2415	2650	2866	3113	3434	3849	4184	5.2
Mogas	1599	2275	2505	2810	3052	3491	3545	3573	3595	3834	4141	4679	4955	6.1
Naphtha	2963	3106	3249	2852	3364	3350	3446	3461	3382	3191	3400	3669	4015	5.0
2. Middle Distillates:	**17919**	**23948**	**25656**	**28005**	**29955**	**32484**	**33106**	**34404**	**36152**	**38146**	**40976**	**45460**	**48544**	**60.1**
of which														
Kerosene	4693	6229	6645	7231	7731	8239	8423	8377	8478	8704	8964	9317	9646	12.0
ATF/Jet A-1	1128	1453	1603	1654	1713	1775	1677	1559	1565	1741	1903	2082	2154	2.7
HSD	10832	14886	16009	17657	18795	20706	21139	22680	24293	25878	28261	32254	35019	43.4
LDO	1036	1123	1156	1245	1437	1486	1506	1462	1407	1370	1369	1311	1223	1.5
3. Heavy Ends	**9417**	**10148**	**10595**	**10864**	**11518**	**12199**	**12128**	**12455**	**12440**	**12096**	**12873**	**13915**	**14296**	**17.7**
FO/TDO	4306	3806	3793	4191	4605	4490	4462	4937	5273	5026	5837	6496	6534	8.1
LSHS/HHS	2878	4094	4254	3953	3851	4330	4524	4265	3994	4166	4052	4189	4313	5.3
Total Fuel Oils	7184	7900	8047	8144	8456	8820	8986	9202	9267	9192	9889	10685	10847	13.4
Lube oils	567	658	721	756	811	888	857	895	811	663	643	689	681	0.8
Greases	25	42	34	35	36	38	35	37	35	25	25	23	24	Neg.
Lubes & Greases (Total)	592	700	755	791	847	926	892	932	846	688	688	712	705	0.8
Bitumen	1292	1126	1309	1379	1498	1695	1581	1706	1823	1824	1939	2005	2273	2.8
Petroleum Coke	174	163	208	246	316	383	290	266	152	132	197	319	276	0.3
Paraffin Wax							70	69	70	74	72	76	58	Neg.
Other Waxes							47	45	50	45	59	57	56	Neg.
Other Misc	175	259	275	304	401	375	262	235	232	141	49	61	103	0.1
Total (1+2+3)	**32523**	**40872**	**43662**	**46416**	**50092**	**54095**	**55035**	**56974**	**58902**	**60612**	**65487**	**72518**	**77224**	**95.7**
Refinery Fuel	**1584**	**2491**	**2612**	**2522**	**2790**	**2684**	**2710**	**2629**	**2753**	**2836**	**3137**	**3238**	**3490**	**4.3**
Grand Total	**34107**	**43363**	**46274**	**48938**	**52882**	**56779**	**57745**	**59603**	**61655**	**63648**	**68624**	**75756**	**80714**	**100.0**

*: Provisional.

Neg.: Negligible

VI. 2a PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1987 TO 1996

(Qty. '000' Tonnes)

PRODUCT	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996(P)	% change 1996 over 1995
1	2	3	4	5	6	7	8	9	10	11	12
1. Light Distillates	**7415**	**8286**	**9259**	**9750**	**10005**	**10288**	**10492**	**11259**	**12781**	**14034**	**9.8**
L.P. Gas	1629	1887	2181	2396	2565	2848	3035	3346	3714	4121	10.9
Mogas	2735	2974	3370	3583	3587	3592	3761	4037	4527	4932	8.9
Naphtha	2875	3258	3421	3397	3418	3380	3310	3258	3685	3795	3.0
SBP/Haxane	65	75	105	127	141	157	149	141	166	212	27.7
Others	111	92	181	247	297	311	237	477	686	974	42.0
2. Middle Distillates:	**25208**	**27318**	**31926**	**33201**	**33715**	**36370**	**37416**	**40280**	**43991**	**47826**	**8.7**
Kerosene	7088	7595	8089	8423	8412	8573	8618	8931	9278	9627	3.8
ATF/Jet A-1	1627	1691	1752	1734	1563	1562	1683	1870	2014	2171	7.8
HSD	17165	18325	20329	21176	21976	24396	25323	27623	30898	34275	10.9
LDO/MDO	1220	1379	1491	1512	1432	1464	1343	1396	1318	1233	(-) 6.5
JBO/Wash Oil	62	65	74	83	83	70	76	83	94	94	-
MTO	103	107	118	133	136	131	138	149	162	195	20.4
Others	53	54	73	140	113	174	235	228	229	231	0.9
3. Heavy Ends:	**10811**	**11352**	**11938**	**12286**	**12121**	**12641**	**12048**	**12741**	**13497**	**14207**	**5.3**
F.O./TDO	4024	4696	4353	4672	4535	5402	4968	5639	6361	6502	2.2
LSHS/HHS	4126	3664	4347	4424	4415	3980	4122	4086	4080	4282	4.9
Fuel Oils (total)	8150	8360	8700	9096	8950	9382	gogo	9725	10441	10784	3.3
Lubes & Greases	794	832	884	904	877	888	750	657	704	690	(-) 2.0
Bitumen/Asphalt	1357	1512	1597	1609	1662	1831	1796	1800	1913	2206	15.3
Pet. Coke	212	280	369	309	281	182	116	199	254	329	29.5
Wax	78	84	110	120	111	122	119	129	135	122	(-) 9.7
others	222	284	278	248	240	236	177	231	50	76	52.0
Total (1+2+3)	**45544**	**48854**	**53123**	**55237**	**55841**	**59299**	**59956**	**64280**	**70269**	**76067**	**8.3**
Refinery Fuel@	**2504**	**2454**	**2678**	**2706**	**2621**	**2793**	**2880**	**3093**	**3217**	**3433**	**6.7**
GRAND TOTAL	**48048**	**51308**	**55801**	**57943**	**58462**	**62092**	**62836**	**67373**	**73486**	**79500**	**8.2**

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

VI. 2b PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1988-89 TO 1996-97

(Qty. '000' Tonnes)

	PRODUCT	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	%Change 1996-97/ 1995-96
	1	2	3	4	5	6	7	8	9	10	11
1.	**Light Distillates**	**8619**	**9412**	**9801**	**10115**	**10310**	**10570**	**11637**	**13143**	**14384**	**9.4**
	L.P.Gas	1962	2268	2415	2650	2866	3113	3434	3849	4184	8.7
	Mogas	3052	3491	3545	3573	3595	3834	4141	4679	4955	5.9
	Naphtha	3364	3350	3446	3461	3382	3191	3400	3669	4015	9.4
	SBP/Haxane	86	112	134	142	155	144	145	175	222	26.9
	Others	155	191	261	289	312	288	517	771	1008	30.7
2.	**Middle Distillates:**	**29955**	**32484**	**33106**	**34404**	**36152**	**38146**	**40976**	**45460**	**48544**	**6.8**
	Kerosene	7731	8239	8423	8377	8478	8704	8964	9317	9646	3.5
	ATF/Jet A-1	1713	1775	1677	1559	1565	1741	1903	2082	2154	3.4
	HSD	18795	20706	21139	22680	24293	25878	28261	32254	35019	8.6
	LDO/MDO	1437	1486	1506	1462	1407	1370	1369	1311	1223	(-) 6.7
	JBO/Wash Oil	72	77	82	75	76	77	87	96	92	(-) 4.2
	MTO	110	118	140	136	124	144	151	177	188	6.2
	Others	97	83	139	115	209	232	241	223	222	(-) 0.4
3.	**Heavy Ends:**	**11518**	**12199**	**12128**	**12455**	**12440**	**12096**	**12873**	**13915**	**14296**	**2.7**
	F.O./TDO	4605	4490	4462	4937	5273	5026	5837	6496	6534	0.6
	LSHS/HHS	3851	4330	4524	4265	3994	4166	4052	4189	4313	3.0
	Fuel Oils (total)	8456	8820	8986	9202	9267	9192	9889	10685	10847	1.5
	Lubes & Greases	847	926	892	932	846	688	668	712	705	(-) 1.0
	Bitumen/Asphalt	1498	1695	1581	1706	1823	1824	1939	2005	2273	13.4
	Pet. Coke	316	383	290	266	152	132	197	319	276	(-) 13.5
	Wax	106	116	117	114	120	119	131	133	114	(-) 14.3
	Others	295	259	262	235	232	141	49	61	81	32.8
	Total (1+2+3)	**50092**	**54095**	**55035**	**56974**	**58902**	**60812**	**65487**	**72518**	**77224**	**6.5**
	Refinery Fuel@	2790	2684	2710	2629	2753	2836	3137	3238	3490	7.8
	GRAND TOTAL	**52882**	**56779**	**57745**	**59603**	**61655**	**63648**	**68624**	**75756**	**80714**	**6.5**

@RBF, Lube Refinery Fuel & TPs Fuel.

VI. 3 SALES/CONSUMPTION OF PETROLEUM PRODUCTS AND MARKET SHARE OF OIL COMPANIES IN INDIA 1970-71 TO 1996-97

(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	9
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	0.9	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
	%	59.2	18.2	18.0		3.8	0.8	100
1985-86	S/C	23840	7580	7638		1552	262	40872
	%	58.3	18.6	18.7		3.8	0.7	100
1986-87	S/C	25820	7935	7944		1669	294	43662
	%	59.1	18.2	18.2		3.8	0.7	100
1987-88	S/C	27083	9330	9445		1971	360	50092
	%	58.3	18.6	18.9		3.9	0.7	100
1988-89	S/C	28986	10183	10346		2206	363	54095
	%	57.9	18.8	19.1		4.1	0.7	100
1989-90	S/C	30997	10377	10576		2284	372	55035
	%	57.3	18.9	19.2		4.1	0.7	100
1990-91	S/C	31426	10688	11047		2498	379	56974
	%	57.1	18.8	19.4		4.4	0.6	100
1991-92	S/C	32362	11409	11511		2686	390	58902
	%	56.8	19.4	19.5		4.6	0.6	100
1992-93	S/C	32906	12099	12011		2860	341	60812
	%	55.9	19.9	19.7		4.7	0.6	100
1993-94	S/C	33501	13160	12588		2990	391	65487
	%	55.1	20.1	19.2		4.6	0.6	100
1994-95	S/C	36359	13160	12588		2990	391	65487
	%	55.5	20.1	19.2		4.6	0.6	100
1995-96	S/C	39858	14763	14151		3273	473	72518
	%	55.0	20.4	19.5		4.5	0.6	100
1996-97	S/C	42054	15732	15460		3471	507	77224
	%	54.4	20.4	20.0		4.5	0.7	100.0

S/C=Sales/Consumption

@ = Included under ESSO/HPCL from 1980-81 onwards.

Source: M 16 Report for the year 1996-97.

VI. 4 DELIVERIES* MADE TO INTERNATIONAL/COASTAL BUNKERS DURING THE YEARS 1985-86 TO 1996-97

(Qty. '000' Tonnes)

ITEMS	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9	10	11	12	13
SHIPPING INTERNATIONAL BUNKERS:												
F.O.	64.3	110.2	165.1	101.9	143.2	107.6	73.8	78.7	116.0	120.1	85.8	87.5
H.S.D.	10.1	6.4	12.0	7.2	8.6	10.7	12.9	14.3	13.3	11.8	18.3	13.7
L.D.O.	31.5	33.7	44.7	38.6	36.0	32.2	29.4	27.7	29.1	25.0	20.4	19.7
TOTAL	**105.9**	**150.3**	**221.8**	**147.7**	**187.8**	**150.5**	**116.1**	**120.7**	**158.4**	**156.9**	**124.5**	**120.9**
COASTAL BUNKERS:												
F.O.	167.7	197.6	200.0	200.0	208.4	208.0	194.3	182.9	195.4	214.4	160.7	194.3
H.S.D.	98.3	134.0	140.0	134.3	120.7	129.5	122.3	111.2	120.6	129.5	120.5	157.6
L.D.O.	39.9	35.6	32.6	38.3	38.0	34.2	34.7	39.8	40.1	38.1	32.1	29.6
TOTAL	**305.9**	**367.2**	**372.6**	**372.6**	**367.1**	**371.7**	**351.3**	**333.9**	**356.1**	**382.0**	**313.3**	**381.5**
TOTAL BUNKERS:												
F.O.	232.0	307.8	365.1	301.9	351.6	315.6	268.1	261.6	311.4	334.5	246.5	281.8
H.S.D.	108.4	140.4	152.0	141.5	129.3	140.2	135.2	125.5	133.9	141.3	138.8	171.3
L.D.O.	71.4	69.3	77.3	76.9	74.0	66.4	64.1	67.5	69.2	63.1	52.5	49.3
TOTAL	**411.8**	**517.5**	**594.4**	**520.3**	**554.9**	**522.2**	**467.4**	**454.6**	**514.5**	**538.9**	**437.8**	**502.4**

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

Source: M6 report of OCC.

VI.. 5a STATE-WISE CONSUMPTION OF MAJOR PETROLEUM PRODUCTS DURING 1995-96
(Including International Bunkers)

(000 Tonnes)

	State/UT	Nephtha	LPG	MS	SKO	ATF	HSD	LDO*	FO	LSHS	Lubes/ Greases	Others	Total
	A States												
1.	Andhra Pradesh	92	289	314	614	41	2867	34	261	90	49	196	4847
2.	Arunachal Pradesh	-	4	16	12	2	59	1	-	-	2	-	96
3.	Assam	26	62	55	266	51	353	3	84	28	19	77	1024
4.	Bihar	90	114	156	609	5	1567	138	405	82	46	221	3433
5.	Delhi	2	309	436	240	643	1153	45	55	25	30	110	3048
6.	Goa	288	18	32	28	28	170	7	161	-	5	12	749
7.	Gujarat	572	300	393	813	48	2403	197	491	1707	46	725	7695
8.	Haryana	-	118	150	165	25	1361	54	328	150	24	84	2459
9.	Himachal Pradesh	-	28	26	37	-	170	4	7	8	3	14	297
10.	J&K	-	34	46	125	11	196	6	2	1	5	28	454
11.	Karnataka	122	194	316	494	78	1777	26	368	127	34	84	3620
12.	Kerala	170	134	206	292	53	1180	9	181	203	25	181	2634
13.	Madhya Pradesh	-	185	216	483	25	1923	33	293	59	39	261	3517
14.	Maharashtra	482	677	722	1545	613	3821	329	1261	987	144	702	11283
15.	Meghalaya	-	5	18	17	-	89	-	-	-	1	8	138
16.	Manipur	-	7	9	22	2	24	-	-	-	1	19	84
17.	Mizoram	-	5	6	7	-	18	-	-	-	-	1	37
18.	Nagaland	-	5	11	13	1	29	-	-	-	1	1	61
19.	Orissa	124	40	72	212	11	631	32	327	3	18	84	1554
20.	Punjab	50	168	313	353	56	1765	50	655	245	27	127	3809
21.	Rajasthan	278	141	197	331	51	2148	48	106	133	23	153	3609
22.	Sikkim	-	2	5	10	-	8	1	1	-	-	2	29
23.	Tamil Nadu	514	322	338	683	108	2869	46	884	201	53	267	6285
24.	Tripura	-	5	6	23	3	33	-	-	-	1	8	79
25.	U.P.	783	456	396	1095	98	3714	102	335	137	54	294	7464
26.	West Bengal	75	195	159	777	104	1660	129	248	-	55	274	3676
	Total (A)	**3668**	**3817**	**4614**	**9266**	**2057**	**31988**	**1294**	**6453**	**4186**	**705**	**3933**	**71981**
	B. Union Territories												
1.	Andaman & Nikobar	-	1	2	5	3	45	-	-	-	1	-	57
2.	Chandigarh	-	20	42	20	22	53	5	12	3	2	17	196
3.	Dadra & Nagar Haveli	-	-	4	3	-	39	4	2	-		2	54
4.	Daman & Diu	-	1	3	3	-	9	1	2	-	-	2	21
5.	Lakshadweep	-	-	-	-	-	-	-	-	-	-	-	-
6.	Pondicherry	1	8	12	15	-	106	3	24	-	3	10	182
	Total (B)	**1**	**30**	**63**	**46**	**25**	**252**	**13**	**40**	**3**	**6**	**31**	**510**
C.	Outside Territories												
1.	Bhutan	-	2	2	5	Neg	14	Neg	3	-	Neg	1	27
2.	Nepal	-	-	-	-	-	-	-	-	-	-	-	-
	Total (C)	**-**	**2**	**2**	**5**	**Neg**	**14**	**Neg**	**3**	**-**	**Neg**	**1**	**27**
	Grand Total (A+B+C)	**3669**	**3849**	**4679**	**9317**	**2082**	**32254**	**1307**	**6496**	**4189**	**711**	**3965**	**72518**

* Excludes LDO Material

VI. 5b STATE-WISE CONSUMPTION OF MAJOR PETROLEUM PRODUCTS DURING 1996-97

('000' Tonnes)

State/UT	Naphtha	LPG	MS	SKO	ATF	HSDO	LDO*	FO	LSHS/ HHS	Lubes & Greases	Others	TOTAL
A. States												
1. Andhra Pradesh	102	308	340	641	44	2989	28	319	107	47	213	5138
2. Arunachal Pradesh	0	4	14	14	2	57	1	0	0	2	4	98
3. Assam	5	65	54	268	51	355	2	69	25	9	127	1030
4. Bihar	57	125	157	652	7	1609	136	378	67	45	148	3381
5. Delhi	0	332	476	243	649	1242	49	36	27	27	99	3180
6. Goa	253	21	34	28	26	189	5	161	0	5	15	737
7. Gujarat	590	313	416	829	67	2763	185	506	1669	43	970	8351
8. Haryana	0	133	150	172	30	1533	47	251	232	19	108	2673
9. Himachal Pradesh	0	36	27	46	0	207	3	12	8	4	20	362
10. J & K	0	41	48	121	14	207	7	11	1	4	28	482
11. Karnataka	168	209	338	510	87	2007	21	379	131	36	125	4011
12. Kerala	169	142	233	289	65	1309	6	199	214	26	162	2814
13. Madya Pradesh	4	199	225	514	27	2072	24	305	49	35	271	3725
14. Maharashtra	749	733	759	1563	547	4041	322	1386	947	131	766	11944
15. Meghalaya	0	6	19	20	0	100	0	0	0	2	8	155
16. Manipur	0	8	9	22	1	26	0	0	0	0	17	83
17. Mizoram	0	6	6	8	0	21	0	0	0	0	6	47
18. Nagaland	0	5	10	15	1	27	0	0	0	1	5	64
19. Orissa	127	44	76	235	11	683	27	309	12	19	79	1622
20. Punjab	49	182	336	358	70	1960	22	411	386	28	189	3991
21. Rajasthan	317	159	205	356	45	2353	39	117	110	24	206	3931
22. Sikkim	0	2	4	12	0	10	1	2	0	0	2	33
23. Tamilnadu	458	345	373	696	150	2983	47	903	180	71	288	6494
24. Tripura	0	5	6	29	6	36	0	0	0	1	6	89
25. Uttar Pradesh	919	506	408	1160	96	4166	88	466	144	55	337	8345
26. West Bengal	47	216	157	793	126	1757	150	271	0	60	249	3826
Total (A)	**4014**	**4145**	**4723**	**8801**	**1996**	**32945**	**1060**	**6491**	**4309**	**694**	**7431**	**76609**
B. Union Territories												
1. Andaman & Nikobar	0	1	2	5	3	48	0	0	0	1	1	61
2. Chandigarh	0	22	46	19	28	55	4	6	6	2	16	204
3. Dadra & Nagar Haveli	0	2	4	3	0	67	2	7	0	3	2	90
4. Daman & Diu	0	1	4	5	0	15	1	3	0	0	3	32
5. Lakshadweep	0	0	0	0	0	5	0	0	0	0	0	5
6. Pondicherry	0	9	13	15	0	114	1	25	0	4	7	188
Total (B)	**0**	**36**	**69**	**47**	**31**	**304**	**8**	**41**	**6**	**10**	**29**	**580**
C. Outside Territories												
1. Bhutan	0	2	2	5	1	15	1	3	0	0	6	35
2. Nepal	0	0	0	0	0	0	0	0	0	0	0	0
Total (C)	**0**	**2**	**2**	**5**	**1**	**15**	**1**	**3**	**0**	**0**	**6**	**35**
Grand Total (A+B+C)	**4014**	**4182**	**4794**	**8853**	**2028**	**33264**	**1069**	**6536**	**4315**	**704**	**7466**	**77224**

VI. 7 Contd. ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF SELECTED PETROLEUM PRODUCTS DURING 1991-92 TO 1996-97

(Qty. '000' Tonnes)

SECTOR	1991-92		1992-93		1993-94		1994-95		1995-96		1996-97	
	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	1996-97	% to total
1	2	3	4	5	6	7	8	9	10	11	12	13
LDO (Regular)												
1. Transport												
(i) Road Transport	1.	0.1	1	0.1	1	0.1	1	0.1	2	0.2	2	0.2
(ii) Aviation	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	1	Neg
(iii) Shipping	61	4.2	66	4.7	65	4.8	62	4.5	51	3.9	46	3.8
(iv) Railways	3	0.2	2	0.1	2	0.1	2	0.1	2	0.2	2	0.2
(v) Other Transport (incl. Agr. Retail Trade)	14	1.0	15	1.1	13	0.9	17	1.2	12	0.9	15	1.2
Sub-Total : 1	**80**	**5.5**	**85**	**6.1**	**82**	**6.0**	**83**	**6.1**	**68**	**5.2**	**66**	**5.4**
2. Plantation/Food (incl. Processing)												
(i) Sugar Mills	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	Neg	-
(ii) Others (incl. Plan. & Food)	36	2.5	34	2.4	35	2.5	34	2.5	40.	3.0	34	2.8
Sub-Total: 2	37	2.6	35	2.5	36	2.6	35	2.6	41	3.1	34	2.8
3. Power Generation (utilities)	230	15.8	211	15.0	182	13.4	165	12.1	166	12.7	184	15.1
4. Industry												
(i) Iron & steel	46	3.2	53	3.8	48	3.5	75	5.5	104	8.0	88	7.2
(ii) Textile & Fibres	46	3.2	40	2.8	39	2.9	38	2.8	43	3.3	33	2.7
(iii) Cement	14	1.0	11.	0.8	11	0.8	17	1.2	15	0.4	16	1.3
(iv) Ceramic & Glass	55	3.8	47	3.3	45	3.3	34	2.5	35	2.7	36	2.9
(v) Chemicals & Allied	121	8.3	146	10.4	145	10.6	144	10.5	154	11.8	154	12.6
(vi) Aluminium	12	0.8	17	1.2	17	.13	5	0.4	5	0.4	4	0.3
(vii) Mining & quarrying	11	0.7	15	1.1	9	0.7	8	0.6	11	0.8	9	0.7
(viii) Engg. (Mech & Elec)	120	8.2	109	7.8	109	8.0	124	9.1	130	9.9	114	9.4
(ix) Fertilizers	6	0.4	3	0.2	3	0.2	4	0.3	5	0.4	4	0.3
(x) Other Industries & Construction	213	14.6	206	14.7	199	14.6	192	14.1	198	15.1	175	14.4
Sub Total : 4	**644**	**44.2**	**647**	**46.7**	**625**	**45.9**	**641**	**46.9**	**700**	**53.6**	**633**	**52.0**
5. Misc. Services (Incl. DGS & D)	465	31.9	424	30.2	437	32.1	441	32.3	332	25.4	301	24.7
TOTAL: (1+2+3+4+5)	1456	100.0	1402	100.0	1362	100.0	1365	100.0	1307	100.0	1218	100.0
F.O. (Regular)												
1. Transport												
(i) Road Transport	8	0.1	7	0.1	7	0.2	8	0.1	10	0.1	8	0.1
(ii) Aviation	1	Neg	5	0.1	3	0.1	3	0.1	2	Neg	3	Neg
(iii) Shipping	245	5.0	235	4.4	292	5.8	323	5.5	236	3.6	249	3.8
(iv) Railways	21	0.4	15	0.3	16	0.3	13	0.2	12	0.2	12	0.2
(v) Other Transport (incl. Agr. Retail Trade)	68	1.4	77	1.5	87	1.7	93	1.6	64	1.0	79	1.2
Sub-Total: 1	**343**	**6.9**	**339**	**6.4**	**405**	**8.1**	**440**	**7.6**	**321**	**4.9**	**351**	**5.4**
2. Plantation/Food (incl. Processing)												
(i) Sugar Mills	18	0.4	16	0.3	15	0.3		13	16	0.3	16	0.2
(ii) Others (incl. Plan & Food)	146	2.9	2.9	174	3.3	171	3.4	3.0	198	3.0	234	3.6
Sub-Total:	**164**	**3.3**	**190**	**3.6**	**186**	**3.7**	**188**	**3.2**	**214**	**3.3**	**250**	**3.8**
3. Power Generation (utilities)	527	10.7	555	10.5	490	9.7	480	9.9	720	11.1	764	11.7

Contd.....

VI. 7 Contd. ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF SELECTED PETROLEUM PRODUCTS DURING 1991-92 TO 1996-97

(Qty. '000' Tonnes)

SECTOR	1991-92		1992-93		1993-94		1994-95		1995-96		1996-97	
	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	Consum-ption	% to total	1996-97	% to total
1	2	3	4	5	6	7	8	9	10	11	12	13
					F.O.(Regular)							
4. Industry												
I) Iron & Steel	363	7.4	372	7.1	368	7.3	409	7.0	552	8.5	507	7.7
II) Textile & Fibre	321	6.5	425	8.1	376	7.5	375	6.4	429	6.6	455	7.0
iii) Cement	78	1.6	75	1.4	62	1.2	73	1.3	155	2.4	193	2.9
iv) Ceramic & Glass	87	1.8	89	1.7	86	1.7	95	1.6	103	1.6	131	2.0
v) Chemical & Allied	636	12.9	725	13.7	678	13.5	563	9.6	712	11.0	797	12.2
vi) Aluminium	114	2.3	142	2.7	110	2.2	122	2.1	132	2.0	163	2.5
vii) Mining & quarrying	43	0.9	43	0.8	58	1.2	63	1.1	80	1.2	70	1.1
viii) Engg. (Mech & Elec)	140	2.8	147	2.8	145	2.9	150	2.5	179	2.8	182	2.8
ix) Fertilizers	1404	28.4	1348	25.6	1160	23.1	1507	25.7	1770	29.7	1374	21.0
x) Other Industries & Construction	506	10.2	596	11.3	560	11.1	587	10.1	724	11.1	819	12.5
Sub-Total:-	**3692**	**74.8**	**3962**	**75.2**	**3603**	**71.7**	**3944**	**67.6**	**4836**	**74.4**	**4691**	**71.8**
5. Misc Services (incl. DGS&D)	211	4.3	227	4.3	342	6.8	685	11.7	405	6.2	478	7.3
TOTAL : (1+2+3+4+5)	4937	100.0	5273	100.0	5026	100.0	5837	100.0	6496	100.0	6534	100.0
					LSHS/HHS							
1. Transport	**22**	**0.5**	**10**	**0.3**	**12**	**0.3**	**2**	**-**	**3**	**0.1**	**3**	**Neg**
2. Plantation/Food (inc. Processing)												
I) Sugar Mill	1	Neg.	Neg.	-	Neg	-	Neg.	-	-	-	-	-
ii) Other (incl. Plan& Food)	28	0.7	35	0.9	40	1.0	27	0.7	32	0.8	25	0.6
SubTotal:2	**29**	**0.7**	**35**	**0.9**	**40**	**1.0**	**27**	**0.7**	**32**	**0.8**	**25**	**0.6**
3. Power Generation (utilities)	**1798**	**42.2**	**113**	**2.8**	**97**	**2.3**	**102**	**2.5**	**1747**	**41.7**	**1634**	**37.9**
4. Industry												
I) Iron & Steel	177	4.2	113	2.8	97	2.3	102	2.5	59	1.4	54	1.2
ii) Textile & Fibre	293	6.9	242	6.1	338	8.1	276	6.8	254	6.1	240	5.5
iii) Cement	36	0.8	35	0.9	53	1.3	50	1.2	48	1.1	63	1.5
iv) Ceramic & Glass	113	2.6	96	2.4	76	1.8	73	1.8	82	1.9	77	1.8
v) Chemicals & Allied	300	7.0	308	7.7	375	9.0	483	11.9	416	9.9	393	9.1
vi) Aluminium	33	0.8	41	1.0	65	1.6	13	0.3	15	0.4	12	0.3
vii) Minning & quarrying	4	0.1	11	0.3	8	0.2	1	-	45	1.1	53	1.2
viii) Engg. (Mech & Elec)	40	0.9	33	0.8	32	0.8	27	0.7	21	0.5	17	0.4
ix) Fertilizers	1046	24.5	1002	25.1	1052	25.2	1001	24.7	1107	26.4	1354	31.4
x) Other Industries & Construction	293	6.9	241	6.0	270	6.5	232	5.7	199	4.7	217	5.0
Sub Total : 4	**2335**	**54.7**	**2122**	**53.1**	**2366**	**56.8**	**2258**	**55.7**	**2246**	**53.6**	**2480**	**57.5**
5. Misc. Services (incl. DGS&D)	81	1.9	48	1.2	72	1.7	141	3.5	161	3.8	171	4.0

Total(1+2+3+4+5)	4265	100.0	3994	100.0	4266	100.0	4052	100.0	4189	100.0	4313	100.0

VI. 8 CONSUMPTION OF DIESEL OIL IN INDIAN RAILWAYS DURING 1960-61 TO 1996-97

Year	No. of Diesel Locomotives Nos.	Consumption of Diesel Oil (In Kls.)	Consumption of Diesel per locomotive (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	846.8
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	1803	797610	442.4
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	1067470	442.2
1981-82	2520	1179682	468.1
1982-83	2638	1227236	465.2
1983-84	2800	1313200	459.0
1984-85	2905	1335664	459.8
1985-86	3046	1440269	472.8
1986-87	3182	1536499	482.9
1987-88	3298	1595897	483.9
1988-89	3454	1652555	478.4
1989-90	3610	1678814	465.0
1990-91	3759	1712816	455.7
1991-92	2905	1731473	443.4
1992-93	4069	1741751	428.1
1993-94	4192	1783162	425.4
1994-95	4259	1819464	427.2
1995-96	4313	1847748	428.4
1996-97(P)	4364	1849157	423.7

(P) Provisional

Source: Railway Board, New Delhi.

VI. 9 INDUSTRY/PLANT-WISE OFFTAKE OF NAPHTHA

(Qty, '000' Mts)

Category and Plant	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97(P)
1	2	3	4	5	6	7	8	9	10	11	12
I. Fertilizer Plants											
Madras Fertilizers	234	105	205	196	201	206	191	164	185	NA	NA
HFC, Durgapur	94	95	55	41	74	95	70	40	0	74	46
FCI, Gorakhpur	98	88	108	98	22	0	0	0	0	0	0
HCF, Barauni	115	131	99	73	104	71	100	31	75	57	49
SFC, Kota	158	139	152	166	176	169	170	175	169	183	197
CCFCL, Kanpur	305	253	292	319	254	294	291	286	356	392	326
RFP, Rourkela	82	75	99	103	105	93	107	129	105	124	123
GSFC, Baroda	125	118	126	132	126	120	78	85	92	75	81
FACT, Cochin	123	105	138	112	129	121	83	130	147	138	144
ZAC, Goa	227	224	212	220	238	266	257	240	253	288	253
IFFCO, Phulpur	251	216	299	264	348	253	312	278	298	262	255
*IFFCO, Kalol	46	49	47	44	55	61	51	56	60	57	46
MCFL, Manglore	162	103	151	111	140	137	99	100	124	122	167
SPIC, Tuticorin	270	234	269	270	261	287	281	276	302	290	266
GNFC, Bharuch	1	Neg.	Neg.	Neg.	1	Neg.	Neg.	Neg.	1	Neg.	Neg.
FACT, Alwaye	65	61	76	61	56	55	50	37	41	33	26
FCI, Bombay	-	13	-	-	-	-	-	-	-	-	-
Coromandal Ferts, Vizag	73	66	66	64	76	68	58	72	64	78	83
NFL Nangal				16	49	48	57	54	46	50	50
Others	59	-	-	8	2	1	1	99	386	701	892
Sub-Total (Fertilizer)	**2488**	**2075**	**2392**	**2298**	**2416**	**2345**	**2256**	**2252**	**2704**	**2924**	**3004**
II. Petrochemical Plants:											
BRPL, Bongaigaon	-	24	16	25	21	17	22	24	-	26	5
HOC, Rasayani	4	4	4	-	-	5	5	5	5	8	8
IPCL, Baroda	444	451	455	417	416	482	449	448	413	477	459
NOCIL, Bombay	259	264	299	287	275	272	293	266	183	140	280
RCF, (Mathanol) Bombay	13	-	15	9	4	0	0	0	0	-	-
UCIL, Bombay	69	-	-	-	-	-	-	-	-	-	-
Rama Petro Chemicals	-	-	48	41	44	33	26	24	25	33	29
Reliance Ind. Ltd.	-	-	59	179	182	185	232	211	163	222	367
National Peroxide				2	2	2	2	2	3	4	4
Oswal Agro				19	71	61	72	19	14	8	55
Others	-	-	1	-	2	2	6	13	38	65	60
Sub-Total (Petro-Chem.)	**724**	**743**	**897**	**979**	**1017**	**1059**	**1107**	**1012**	**844**	**983**	**1267**
III. Others											
HOC, Rasayani	-	-	-	5	5	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
FCI Talchar	-	-	4	2	0.0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
DESU	-	-	56	59	0.0	1	0	0	0	0	0
HSL, Bhilai etc.	37	34	11	2	0.0	0	0	0	0	0	0
HCL, Khetri	-	-	4	4	4	5	1	7	2	4	1
Others					5	34	19	19	79	221	395
Sub-Total (others)	**37**	**34**	**75**	**72**	**14**	**40**	**20**	**26**	**81**	**234**	**396**
Grand Total (I+II+III)	**3249**	**2852**	**3364**	**3349**	**3447**	**3444**	**3383**	**3290**	**3629**	**4141**	**4667**

Source: IndustryPerformance Review, March, 1997. (P): Provisional

2649 / P&NG / F—6-A

VI. 10 PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8
			(I) Power				
A. Northern:							
OBRA Thermal	19.9	28.1	30.4	31.3	34.2	22.9	23.1
HSEB Hardwaganj	6.3	3.7	3.8	11.7	13.8	3.6	3.9
BTPS Bhadrapur	20.7	18.2	5.5	4.3	0	0.0	9.8
GNTP Bhatinda	3.9	2.6	2.7	3.7	2.5	7.6	4.8
TPS Paricha	6.5	5.8	10.6	10.7	7.3	11.2	7.0
TPS Singrauli	5.4	1.5	0.0	4.2	10.9	2.9	7.6
TPS Rihand	19.7	4.1	2.9	0.0	7.1	12.3	1.6
KTPS Kota	36.3	22.9	9.8	14.0	18.0	18.4	5.5
DESU Delhi (BPC+HPC+IOC)	39.7	52.1	46.3	33.8	24.5	29.3	27.7
HSEB Faridabad	2.7	3.5	3.4	4.3	5.3	5.7	7.8
TPS Ropar	11.3	15.0	23.8	31.8	28.2	24.7	19.3
TPS Panipat	38.0	43.4	39.4	29.4	33.7	48.3	57.4
HWP Rawatbhatta	9.1	45.7	45.2	24.1	46.8	49.3	29.2
Sub-Total(A)	**219.5**	**246.6**	**233.8**	**209.0**	**232.3**	**238.9**	**207.7**
B. Eastern:							
ASEB Chandrapura	71.1	75.0	42.3	31.9	55.4	65.1	43.1
CTPS Chandrapur	36.1	39.1	39.7	34.4	9.7	32.4	44.6
DTPS Durgapur	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPL Durgapur	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NTPC Farrakka	0.0	2.4	4.1	34.0	34.3	24.4	20.8
BTPS Barauni	23.8	30.0	13.5	11.1	17.8	18.4	15.7
NTPC Kanti (Muzzafarpur)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TPS Patratu	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTPS Talcher	7.6	11.8	6.9	6.7	10.7	15.4	7.7
BTPS Salakati	24.8	37.6	34.2	11.3	3.8	9.0	8.7
Sub-Total (B)	**163.4**	**195.9**	**140.7**	**129.4**	**131.7**	**162.7**	**140.6**
C. Western:							
GEB Dhuwaran	756.2	746.7	691.0	498.5	637.4	745.8	729.1
GEB Ukai	16.6	26.3	34.8	33.0	48.6	63.9	70.5
GEB Gandhinagar	13.0	21.4	14.4	9.8	8.9	24.2	31.8
AECO Sabarmati	0.0	5.9	5.5	6.9	11.1	9.2	10.8
GEB Wanakbari	55.0	80.7	47.3	43.4	61.3	68.2	80.7
MPEB Sarani	107.5	71.5	102.1	66.6	64.6	48.0	29.3
MSEB Koradi	24.0	28.7	26.7	25.3	19.9	13.6	19.4
MSEB Chanderpur	14.8	16.6	29.6	50.9	39.9	23.6	16.2
MPEB Dhari	13.5	18.8	16.8	18.3	13.7	12.2	9.6
MSEB Nasik	29.9	16.8	12.6	13.1	22.0	16.6	29.2
MSEB Bhusawal	12.4	7.3	9.2	5.8	6.6	12.1	3.7
MSEB Paras	1.9	0.0	1.4	3.0	1.6	0.5	2.4
MPEB Parli	34.5	16.3	18.1	5.4	16.8	23.2	33.5
NTPC Korba	21.3	16.1	14.5	11.3	9.7	7.3	5.2
MPEB Korba	19.1	16.5	0.0	17.2	22.4	14.8	14.6
GEB Kandla	-	-	-	-	-	-	-
TATA Thermal	718.3	655.2	812.2	767.9	629.1	683.2	575.3
MPEB Chachai	14.6	12.8	17.8	13.5	18.8	17.7	5.8
NTPC Waidhan	23.0	28.7	17.9	5.6	10.1	7.0	3.9
MSEB Kaperkada	13.9	16.0	11.3	5.6	3.0	5.4	2.8
Sub-Total (C)	**1889.5**	**1802.3**	**1883.3**	**1601.1**	**1645.5**	**1771.5**	**1672.8**

Contd. .....

VI. 10 Contd. PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8
D. Southern:							
TTPS Tuticorin	11.2	21.8	14.7	14.1	7.2	4.3	3.1
KTPS Palancha	5.1	8.2	14.4	11.9	11.1	13.7	13.1
RTPS Raichur	3.6	7.2	1.2	1.8	6.3	9.4	2.4
MTPP Metturdam	13.4	4.1	5.5	2.0	1.3	9.7	30.8
NTPC Ramagundam	26.0	7.1	13.4	6.6	5.1	4.0	0.0
ETPS Ennore	7.6	4.1	2.9	5.2	3.6	6.8	2.6
NCL Neyveli TML	9.5	7.2	21.0	40.2	27.1	47.5	39.3
HWP Manuguru	8.7	30.4	21.5	11.5	25.7	17.8	15.1
Sub-Total (D)	**85.1**	**90.1**	**94.6**	**103.90**	**174.4**	**232.7**	**215.4**
Total: Power (A+B+C+D)	**2357.5**	**2334.9**	**2352.4**	**2043.4**	**2183.9**	**2405.8**	**2236.5**
			(ii) Fertilizer Plants:				
A. Northern:							
Indo Gulf Jagdis	-	-	-	13.7	52.8	49.7	56.3
NFL Nangal	294.1	296.1	271.8	264.7	265.8	332.9	276.5
NFL Bhatinda	248.0	322.1	267.3	280.1	282.7	356.3	262.7
NFL Panipat	315.7	296.5	271.7	293.0	259.2	334.2	267.3
IFFCO Phulpur	18.7	29.9	22.2	21.1	22.8	25.5	19.8
SFC Kota	0.0	27.0	1.8	3.7	8.1	10.6	2.0
Sub-Total (A)	**876.5**	**971.6**	**820.8**	**876.3**	**891.4**	**1109.2**	**884.6**
B. Eastern:							
HFC Holida	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HFC Durgapur	18.0	18.6	16.2	6.2	4.6	9.6	20.8
FCI Sindri	169.5	169.1	194.3	176.1	209.8	212.8	209.5
HFC Barauni	24.0	20.8	20.8	6.7	24.9	19.4	14.1
FCI Talcher	11.4	13.9	9.6	12.6	6.5	7.3	8.3
Sub-Total (B)	**222.9**	**222.4**	**240.9**	**201.6**	**245.8**	**249.1**	**252.7**
C. Western:							
ZAC Goa:	92.5	98.0	97.5	97.6	98.7	113.7	106.3
IFFCO Kalol	37.4	36.4	35.7	31.9	43.7	47.0	41.2
GSFC Baroda	115.9	122.5	129.8	122.8	136.5	135.6	142.2
GNFC Bharuch	414.9	498.0	433.6	381.9	449.0	487.2	471.1
Sub-Total (C)	**660.7**	**754.9**	**696.6**	**634.2**	**726.9**	**783.5**	**760.8**
D. Southern:							
MFL Madras	83.3	83.0	73.2	86.4	81.1	91.0	75.5
MCFL Mangalore	70.4	74.2	58.3	63.8	60.8	61.0	83.2
FACT Cochin	101.7	95.4	60.1	77.4	104.5	114.9	112.7
NLC Neyveli	69.9	116.6	65.7	96.4	75.0	80.0	85.6
SPIC Tuticorin	173.0	190.9	166.4	173.5	182.6	184.6	178.3
FCI Ramagundam	12.4	16.3	8.8	11.3	6.6	8.6	8.9
Coramandal Fert.	36.3	35.9	29.2	18.5	20.9	42.5	46.0
Sub-Total (D)	**547.0**	**612.3**	**461.7**	**527.3**	**531.5**	**582.6**	**590.2**
Total Fertilizer (A+B+C+D)	**2307.1**	**2561.2**	**2220.0**	**2239.4**	**2395.6**	**2724.4**	**2488.3**

contd.....

VI. 10 Contd. PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8
			(iii) Petrochemical Plant				
C. Western:							
IPCL Baroda	41.3	34.1	81.0	107.7	215.5	127.7	95.6
NOCIL Bombay	0.2	0.0	0.0	0.2	0.4	1.6	0.0
Reliance Industry, Bombay	155.4	147.7	170.5	180.0	161.8	145.4	135.0
Sub-Total (C)	**196.9**	**181.8**	**251.5**	**287.9**	**377.7**	**274.7**	**230.6**
D. Southern:							
FACT Udyogmandal	54.6	7.8	0.9	3.6	6.1	11.3	6.9
TNPL Madras	48.8	43.5	47.0	45.3	47.9	63.0	55.0
Mysore Petrochemicals	-	-	-	-	-	-	-
Sub-Total (D)	**103.4**	**51.3**	**47.9**	**48.9**	**54.0**	**74.3**	**61.9**
Total: Petrochemical (C+D)	**300.3**	**233.1**	**299.4**	**336.8**	**431.7**	**349.0**	**292.6**
			(IV) Steel Plants				
B. Eastern:							
TISCO Bumapur	1.4	0.0	0.0	0.0	0.0	0.0	0.0
RSP Rourkela	66.2	82.0	28.6	58.2	66.3	81.6	45.7
DSP Durgapur	67.2	70.9	28.3	11.8	9.5	0.0	1.2
ASP Durgapur	24.1	9.9	25.6	22.9	13.7	13.4	4.6
PCBL Durgapur	-	-	-	-	-	-	-
TISCO Jamshedpur	47.2	59.0	53.7	43.0	33.9	5.2	0.0
BSP Bokaro	65.3	101.6	98.0	107.5	76.4	72.6	57.1
SAIL Patroatu	2.1	2.0	0.2	0.2	9.3	5.7	10.7
HCL Ghatsila	5.5	-	-	-	-	-	-
Sub-Total (B)	**279.0**	**325.4**	**234.4**	**243.6**	**209.1**	**178.5**	**119.3**
C. Western:							
HSL Bhillai	23.0	31.9	25.7	19.9	27.2	25.7	26.5
SAIL Bhillai	-	-	-	-	-	-	-
Sub-Total(C)	**23.0**	**31.9**	**25.7**	**19.9**	**27.2**	**25.7**	**26.5**
D. Southern:							
S. Viscose	27.7	-	-	-	-	-	-
Vizag Steel Plant	28.8	15.5	4.0	10.2	2.8	7.5	2.8
FACT ASCL	22.5	-	-	-	-	-	-
Sub-Total (D)	79.0	15.5	4.0	10.2	2.8	7.5	2.8
Total Fertilizer (B+C+D)	**381.0**	**372.8**	**264.1**	**273.7**	**239.1**	**211.6**	**148.6**
			(V) Others				
A. Northern:							
Hindalco	28.3	30.5	32.0	31.9	34.2	35.9	5.8
Sub-Total(A)	**28.3**	**30.5**	**32.0**	**31.9**	**34.2**	**35.9**	**5.8**
B. Eastern:							
Paradeep Phosph	-	-	-	0.8	4.2	0.0	0.0
NALCO Angul	-	22.1	159	17.1	20.0	25.5	23.9
IRE Chatrapur	3.5	1.6	0.0	0.0	9.0	14.5	6.8
NELCO Damanjodi	23.9	57.8	68.2	47.4	65.6	65.1	62.2
OCL Rajgangapur	11.3	10.8	18.6	10.9	14.9	17.9	21.5
TELCO Jamshedpur	11.4	14.5	62.4	9.8	15.9	17.0	19.1
HCL Ghatsila	-	10.4	9.3	4.4	10.8	9.6	4.4
Sub-Total (B)	**50.1**	**117.2**	**174.4**	**90.4**	**140.4**	**149.6**	**137.9**

Contd. .....

VI. 10 Contd. PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Cateogry and Plant	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8
C. Western:							
HOC Rasayani	14.5	13.9	10.5	9.6	9.3	9.2	9.2
HOC Mandovi Pellets	-	-	19.7	26.6	17.0	19.5	0.0
Sub-total(c)	**14.5**	**13.9**	**30.2**	**36.2**	**26.3**	**28.7**	**9.2**
D. Southern:							
Grasim	-	-	-	13.4	12.7	12.9	6.3
S.1. Viscose	-	28.4	24.9	23.4	40.6	42.3	31.3
Indal Bengaum	13.3	11.6	5.8	42.5	46.0	54.9	48.9
Tex MACO	0-0	0-0	0-0	3.4	4.1	4.2	6.4
Ballapur Indus	3.4	0.0	0.0	14.3	13.6	9.1	5.4
Nelco Angul	12.1	-	-	-	0.0	-	-
Chem. Plast	0.0	21.6	30-5	37.3	41.6	41.5	45.9
HOC. Cochin	3.2	2.2	0.6	18.5	19.8	21.2	18.7
Kudramukh Iron & Ore Company	44.3	36.2	36.5	46.5	39.8	44.1	56.9
Fact Ascl	-	22.9	20.1	69.2	51.1	61.8	67.2
Sub-Total(D)	**76.3**	**122.9**	**118.4**	**268.5**	**278.1**	**292.0**	**287.0**
Total: Others (A+B+C+D)	**169.2**	**284.5**	**355.0**	**427.0**	**479.0**	**506.2**	**439.9**
			(VI) General Trade				
A Northern Region	533.7	557.3	673.3	679.4	843.1	810.9	1053.5
B Eastern Region	471.1	366.4	467.1	397.1	461.4	446.5	517.2
C Western Region	1573.0	1581.6	1647.6	1871.9	1913.5	2076.7	2226.4
D Southern Region	893.0	906.1	1058.5	838.1	941.0	1149.8	1301.5
Total: General Trade (A+B+C+D)	**3470.8**	**3411.4**	**3811.2**	**3786.5**	**4159.1**	**4484.0**	**5098.5**
Grand Total (I+II+III+IV+V+VI)	**8985.9**	**9197.9**	**9302.1**	**9106.8**	**9888.4**	**10680.9**	**10704.3**

P: Provisonal Source: Industry Performance Review March, 1997.
Note: Separate figures for some of the plants like Reliance Industries, Patalganga etc. are not available.

VI. 11 STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA DURING 1995-96*

State/Union Territories	Gas Stations		Diesel Station		
	Natural Gas (Million Cu. Mts.)	Generation (GWH)	Diesel Oil (K.Lts.)	Generation (GWH)	Average Oil consumed Lts/Kwh.
1	2	3	4	5	6
NORTHERN REGION:					
Haryana	0.00	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00
Jammu & Kashmir	19885.27	63.00	0.00	0.00	0.00
Panjab	0.00	0.00	0.00	0.00	0.00
Rajasthan	12.58	16.33	0.00	0.00	0.00
Uttar Pradesh	0.00	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00	0.00
Delhi	7916.89 (H+G)	625.69	0.00	0.00	0.00
WESTERNS REGION:					
Gujarat	663.85	1654.82	0.00	0.00	0.00
Madhya Pradesh	0.00	0.00	0.00	0.00	0.00
Maharashtra	2074.14	6343.21	0.00	0.00	0.00
Goa	0.00	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00
SOUTHERN REGION:					
Andhra Pradesh	144.59	540.33	0.00	0.00	0.00
Karnataka	0.00	0.00	162631.92	543.00	0.30
Kerala	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	5.67	17.91	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00	0.00
Lakshadweep	0.00	0.00	4164.50	15.41	0.27
EASTERN REGION:					
Biher	0.00	0.00	0.00	0.00	0.00
Orissa	0.00	0.00	0.00	0.00	0.00
West Bengal	23228.36(H)	37.20	0.00	0.00	0.00
D.V.C	92467.33(H)	42.09	0.00	0.00	0.00
A. & N. Islands	0.00	0.00	23613.86	83.87	0.28
Sikkim	0.00	0.00	171.49	0.74	0.23
NORTH EASTERN REGION:					
Assam	406.63	728.77	0.00	0.00	0.00
Manipur	0.00	0.00	1560.11	3.70	0.42
Meghalaya	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	189.74	0.45	0.42
Tripura	145.65	152.24	733.68	1.96	0.37
Arunachal Pradesh	0.00	0.00	5121.19	16.90	0.30
Mizoram	0.00	0.00	3734.27	13.07	0.29
Central Sector	7669.96	14636.29	0.00	0.00	0.00
TOTAL (ALL INDIA)	**154620.92**	**24858.38**	**201920.76**	**679.10**	**0.30**

Source: Central Electricity Authority. * : Provisional
(H) = HSD K. Litres.
GWH = Gigawatt Hour.

VI. 12 STATE-WISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 1995-96

State/Union Territories	STEAM STATIONS								
	Coal (MT)	Lignite (MT)	Furnace Oil (KL)	Light Diesel Oil/HSD (KL)	LSHS/HHS (KL)	Natural Gas (Million Cub. Mtrs.)	Heat Input (K. Cal. x10^9)	Gross Generation (GWH)	Average Heat input (K.Cal/Kwh)
1	2	3	4	5	6	7	8	9	10
Northern Region:									
Haryana	2507914	0	21837	3082	29000	0	10862	3342	3250
Himachal Pradesh	0	0	0	0	0	0	0	0	0
Jammu & Kashmir	0	0	0	0	0	0	0	0	0
Panjab	5824080	0	3308	3200	28634	0	22792	8232	2769
Rajasthan	3214235	0	17438	2706	6190	0	16734	5935	2820
Uttar Pradesh	13959825	0	52772	36039	0	0	46117	17813	2589
Chandigarh	0	0	0	0	0	0	0	0	0
Delhi	1424874	0	27127	2606	0	0	4580	1593	2874
Western Region:									
Gujarat	12481108	70745	45788	7386	841540	198	64073	23588	2716
Madhya Pradesh	12976057	0	92305	27263	4642	0	4657	15346	3032
Maharashtra	25243214	0	103917	16031	1120338	623611	110276	39794	2771
Goa	0	0	0	0	0	0	0	0	0
D. & N. Haveli	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0
Southern Region:									
Andhra Pradesh	12475227	0	41060	4218	991	0	40889	15103	2707
Karnataka	3335427	0	7815	173	0	0	11072	4722	2345
Kerala	0	0	0	0	0	0	0.00	0.00	0
Tamil Nadu	1252133	16023	1712	1758	0	0	45604	17220	2648
Pondicherry	0	0	0	0	0	0	0.00	0.00	0
Eastern Region:									
Bihar	1940043	0	13741	45813	11638	0	8055	2007	4013
Orissa	1116485	0	21072	0	0	0	5065	1374	4681
West Bengal	9582506	0	0	56400	0	0	45526	14117	3224
D.V.C	4775172	0	91946	56400	0	0	22162	6403	3461
A. & N. Islands	0	0	0	0	0	0.00	0.0	0	0
Sikkim	0	0	0	0	0	0	0.00	0.00	0
North Eastern Region:									
Assam	340799	0	59050	3787	52874	0	2870	694	4136
Manipur	0	0	0	0	0	0	0.00	0.00	0
Meghalaya	0	0	0	0	0	0	0.00	0.00	0
Nagaland	0	0	0	0	0	0	0.00	0.00	0
Tripura	0	0	0	0	0	0	0.00	0.00	0
Arunachal Pradesh	0	0	0	0	0	0	0.00	0.00	0
Mizoram	0	0	0	0	0	0	0.00	0.00	0
Central Sector	51766552	14474388	123594	7209	22226	0	246636	96461	2557
Total (All India)	174215651	15181838	738793	217631	2119831	623809	749886	273744	2739

MT: Metric Tonnes KL : Kilo Litre GWH : Gigawatt Hour.

Source: Central Electricity Authority Kwh: Kilowatt Hour

VII. 1 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1970 TO 1996

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

Year	Crude Oil		Petroleum Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7
			GROSS IMPORTS			
1970	11665	102.36	970	30.53	12635	132.89
1975	13600	992.02	2291	199.46	15891	1191.48
1980	15976	3038.66	6800	1788.28	22776	4826.94
1981	15528	3793.83	5697	1638.58	21225	5423.41
1982	17327	4116.89	4842	1551.37	22269	5668.26
1983	15552	3471.47	4260	1246.60	19812	4718.07
1984	14620	3525.16	6043	1850.31	20663	5375.46
1985	14811	3808.74	4292	1440.70	19103	5249.44
1986	14481	2069.65	3362	818.06	17843	2887.71
1987	17977	3105.25	3659	884.69	21636	3989.94
1988	17712	2811.28	5554	1273.36	23266	4084.64
1989	18919	3718.63	6489	2106.33	25408	5824.96
1990	20793	5829.62	7454	3541.64	28247	9471.26
1991	21813	6827.57	9746	5533.55	31559	12361.12
1992	29977	10423.44	10308	5711.66	40285	16143.60
1993	30309	10916.90	11954	7107.23	42263	18024.13
1994	27895	9915.10	13918	7438.77	41813	17353.87
1995	26901	10856.71	17931	10251.01	44832	21107.72
1996	32812	17194.53	20764	15454.63	53576	32649.16
			EXPORTS			
1970	-	-	412	5.72	412	5.72
1975	-	-	166	13.83	166	13.83
1980	-	-	70	17.98	70	17.98
1981	-		55	1513	55	15.13
1982	4391	1044.71	648	101.23	5039	1145.94
1983	4723	1041.87	1148	286.23	5039	1145.94
1984	6760	1598.55	1071	271.63	7831	1870.18
1985	2044	603.88	1695	482.06	3739	985.94
1986	-	-	2364	389.2	2364	389.32
1987	-	-	3455	662.07	3455	662.07
1988	-	-	2267	472.85	2267	472.85
1989	-	-	2531	654.84	2531	654.84
1990	-	-	2605	941.40	2605	941.40
1991	-	-	2477	1041.13	2477	1041.13
1992	-	-	3986	1658.33	3986	1658.33
1993	-	-	4003	1547.22	4003	1547.22
1994	-	-	3482	1580.74	3482	1580.74
1995	-	-	3318	1728.55	3318	1728.55
1996	-	-	3326	2050.49	3326	2050.49
			NET IMPORTS			
1970	11665	102.36	558	24.81	12223	127.17
1975	13600	992.02	2125	185.63	15725	1117.65
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	12767	3304.86	2597	958.64	15364	4263.50
1986	14481	2069.65	998	428.74	15479	2498.39
1987	17977	3105.25	204	222.62	18181	3327.87
1988	17712	2811.28	3287	1273.36	20999	3611.79
1989	18919	3718.63	3958	1451.49	22877	5170.12
1990	20793	5829.62	4849	2600.24	25642	8529.88
1991	21813	6827.57	7269	4492.42	29082	11319.99
1992	29977	10423.44	6322	4052.83	36299	14485.27
1993	30309	10916.90	7951	5560.01	38260	16476.91
1994	27895	9915.10	10436	5858.03	38331	15773.13
1995	26901	10856.71	14613	8522.46	41514	19379.17
1996	32812	17194.53	17438	13404.14	50250	30598.67

VII.2 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1970-71 TO 1996-97

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

Year	Crude Oil		Petroleum 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
1975-76	13624	1051.76	2218	204.34	15842	1256.10
1980-81	16248	3348.97	7289	1917.34	23537	5266.54
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	15144	3686.80	3865	1273.90	19009	4960.40
1986-87	15476	2120.19	3047	652.69	18523	2772.88
1987-88	17734	3986.31	4151	1024.32	21883	4010.63
1988-89	17815	2861.08	6495	1559.84	24310	4420.92
1989-90	19490	4089.35	6564	2254.71	26054	6344.06
1990-91	20699	6118.42	8660	4660.21	29359	10778.32
1991-92	23994	7820.05	9445	5218.27	40530	17045.46
1992-93	29247	10685.52	11283	6359.60	42898	17729.95
1993-94	30822	10316.03	12076	7041.93	41300	17837.74
1994-95	27349	10316.03	13951	7521.71	41300	17837.74
1995-96	27342	11517.00	20335	12577.85	47677	24094.95
1996-97	33906	18538.19	20265	15633.49	54171	34171.68
			EXPORTS			
1970-71	-	-	332	4.67	332	4.67
1975-76	-	-	170	13.96	170	13.96
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	1197.06
1983-84	5522	1231.10	1472	356.96	6994	1588.06
1984-85	6478	1563.16	933	255.03	7411	1818.19
1985-86	528	135.15	1963	509.58	2491	644.73
1986-87	-	-	2491	411.23	2491	411.23
1987-88	-	-	3412	648.75	3412	648.75
1988-89	-	-	2295	523.63	2295	523.63
1989-90	-	-	2593	695.56	2593	695.56
1990-91	-	-	2648	1003.94	2648	1003.92
1991-92	-	-	2936	1214.65	2936	1214.65
1992-93	-	-	3719	1606.28	3719	1606.28
1993-94	-	-	4034	1508.81	4034	1508.81
1994-95	-	-	3254	1587.36	3254	1587.36
1995-96	-	-	3435	1831.98	3435	1831.93
1996-97	-	-	3162	2079.65	3162	2079.65
			NET IMPORTS			
1970-71	11683	106.72	752	25.24	12435	131.96
1975-76	13624	1051.76	2048	190.38	15672	1242.14
1980-81	16248	3348.97	7253	1909.11	23501	5258.08
1981-82	14460	3540.15	4831	1438.03	19289	4978.18
1982-83	12397	2980.37	4233	1420.15	166.30	4400.52
1983-84	10445	2309.95	2856	1913.79	13301	3223.74
1984-85	7164	1867.18	5159	1659.88	12323	3527.06
1985-86	14616	3591.65	1902	764.02	16518	4315.67
1986-87	15476	2120.19	556	241.47	16032	2361.66
1987-88	17732	2986.31	739	375.57	18471	3361.88
1988-89	17815	2861.08	4200	1036.21	22015	3897.29
1989-90	19490	4089.35	3971	1559.15	23461	5648.50
1990-91	20699	6118.42	6012	3656.29	26711	9774.71
1991-92	23994	7820.05	6509	4003.62	30503	11823.67
1992-93	29247	10685.86	7564	4753.32	36811	15439.18
1993-94	30822	10688.52	8042	5532.62	386864	16221.14
1994-95	27349	10316.03	10697	5934.35	38046	16250.36
1995-96	27342	11517.00	16900	10745.92	44242	22262.92
1996-97	33906	18538.19	17103	13553.84	51009	32092.03

VII. 3 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS (PRODUCT-WISE) 1987 TO 1996

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

ITEM	1987		1988		1989		1990		1991		1992		1993		1994		1995		1996	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
GROSS IMPORTS@																				
A. Crude Oil	17977	3105.25	17712	2811.28	17919	3718.63	20793	5929.62	21813	6827.57	29977	10432.44	30309	10916.90	27895	9915.10	26901	10856.71	32812	17194.53
B. Petroleum Products																				
I. Light Distillates	116	35.63	215	64.10	294	91.80	346	147.67	265	185.47	329	236.56	360	217.98	569	347.27	932	702.53	1186	1010.73
1. Naphtha	16	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Others	100	31.74	215	64.10	294	91.80	346	147.67	265	185.45	329	236.56	360	217.98	569	347.27	932	702.53	1186	1010.73
II. Middle Distillates	3346	765.77	4551	1000.51	5854	1818.79	6826	3186.89	9039	4871.63	9592	4989.73	113.99	6597.03	13119	6857.21	16084	9109.40	18520	13886.02
1. ATF	26	6.23	78	17.78	213	69.19	94	31.09	24	10.10	-	-	-	-	27	17.03	120	81.50	178	141.92
2. SKO	2215	512.00	2407	552.80	2685	870.57	2953	1549.02	3495	1993.84	3346	1831.63	3792	2355.68	4514	2544.03	4923	3033.85	4315	3506.75
3. HSDO	1101	245.81	2066	429.83	2956	8879.03	3779	1606.78	5520	2868.69	6246	3158.10	7607	4241.35	8578	4296.15	11040	5994.06	14028	10237.34
III. Heavy Ends	197	83.29	788	208.85	381	195.74	282	207.08	418	476.47	387	484.87	195	292.22	231	234.29	916	439.08	1058	557.89
1. FO	-	-	465	52.19	-	-	-	-	-	-	-	-	-	-	95	28.03	850	308.30	1058	557.89
2. Lubes	184	70.81	306	134.51	321	174.57	282	178.56	371	424.93	358	416.24	166	224.76	81	132.87	62	123.58	1009	425.82
3. Waxes	13	12.48	20	22.15	20	21.17	20	28.52	21	42.21	29	68.63	29	67.46	28	59.12	4	7.20	49	132.07
4. Others	-	-	-	-	-	-	-	-	-	26	9.33	-	-	-	-	14.27	-	-	-	-
Total (B)	3659	884.59	5554	1273.36	6489	2106.33	7454	3541.64	9722	5533.55	103.08	5711.16	11954	7107.23	13918	7438.77	17931	10251.01	20764	15454.63
Grand Total (A+B)	21636	3989.94	23266	4084.64	25408	5824.96	28247	9471.26	31535	12361.12	40285	16143.60	42263	18024.13	41813	17353.87	44832	21107.72	53576	32649.16
EXPORTS@																				
A. Crude Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. Petroleum Products																				
I. Light Distillates	2637	532.11	2024	410.78	2384	627.07	2247	840.87	1906	828.47	2562	1239.59	2329	1051.07	2982	1308.35	2905	1461.89	2819	1714.35
1. Naphtha	2619	527.08	2002	403.87	2014	560.14	1608	617.27	1234	549.66	1700	836.52	1465	674.01	2277	1011.76	2372	1219.15	2355	1435.72
2. Others	18	5.03	22	6.91	310	66.93	639	223.60	672	278.81	862	403.07	864	377.06	305	296.98	533	242.74	464	278.63
II. Middle Distillates	172	44.91	193	55.86	60	17.28	85	35.44	221	137.58	264	166.46	291	198.90	335	229.94	389	255.64	421	295.32
1. HSD/LDO	88	22.42	99	27.67	28	8.16	43	16.93	124	74.26	144	88.76	155	103.07	307	208.12	206	133.90	212	145.01
2. Others	84	22.49	94	28.19	32	9.12	42	18.51	97	63.32	120	77.70	136	95.83	28	21.82	183	121.74	209	150.31
III. Heavy Ends	646	85.06	50	6.21	87	10.49	273	65.09	350	75.08	1160	252.28	1383	297.25	165	42.45	24	11.02	86	40.82
1. FO	644	84.02	49	5.43	84	9.532	272	64.82	347	73.08	1154	249.20	1367	292.89	160	36.02	24	10.88	86	40.59
2. Othes	2	1.03	1	0.78	3	0.97	1	0.27	3	2.00	6	3.08	16	4.36	5	6.43	Nil	0.14	Nil	0.23
Total (B)	3455	662.07	2267	472.85	2351	654.84	2605	941.40	2477	1041.13	3986	1658.33	4003	1547.22	3482	1580.74	3318	1728.55	3326	2050.49
Grand Total (A+B)	3455	662.07	2267	472.85	2531	654.84	2605	941.40	2477	1041.13	3986	1658.33	4003	1547.22	3482	1580.74	3318	1728.55	3326	2050.49
NET IMPORTS																				
A. Crude Oil	17977	3105.25	17712	2811.28	17919	3718.63	20793	5929.62	21813	6827.57	29977	10432.44	30309	10916.90	27895	9915.10	26901	10856.71	32812	17194.53
B. Petroleum Products	204	222.62	3287	800.51	3958	1451.49	4849	2600.24	7245	4492.42	6322	4052.83	7951	5560.01	10436	5858.03	14613	8522.46	17438	13404.14
Total (Net Imports)	18181	3327.87	20999	3611.79	22877	5170.12	25642	8529.86	29058	11319.99	36299	14485.27	38260	16476.91	38331	15773.13	41514	19379.17	50250	30598.67

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

VII. 4 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS (PRODUCT-WISE) (FINANCIAL YEARS)

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

ITEM	1990-91		1994-95		1995-96		1996-97*	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
GROSS IMPORTS@								
A. Crude Oil	20699	6118.42	27349	10316.03	27342	11517.00	33906	18538.19
B. Pol. Products								
I. Light Distillates	334	164.26	594	419.17	1117	816.65	1490	1491.83
1. LPG	329	160.26	592	416.78	678	530.54	1035	1116.86
2. Others	5	4.00	2	2.99	439	286.11	455	374.97
II. Middle Distillates	8047	4253.60	12955	6816.71	17950	11155.79	18037	13745.76
1. ATF	27	7.98	78	51.31	97	69.45	150	119.69
2. SKO	3340	1963.37	4240	2405.31	5001	3325.56	4279	3538.86
3. HSD	4680	2282.25	8637	4360.09	12852	7760.78	13608	10087.21
III. Heavy Ends	279	242.35	402	285.23	1268	605.41	738	395.90
1. Furnace Oil	-	-	267	91.62	1209	474.55	694	277.38
2. Lubes	256	207.91	87	138.53	58	130.18	44	118.52
3. Waxes	23	34.44	20	40.81	0.36	0.68	-	-
4. RPC	-	-	-	-	-	-	-	-
5. Others	-	-	28	14.27	-	-	-	-
TOTAL (B)	8660	4660.21	13951	7521.71	20335	12577.85	20265	15633.49
GRAND TOTAL (A+B)	29359	10778.63	41300	17837.74	47677	24094.85	54171	34171.68
EXPORTS@@								
A. Crude Oil	-	-	-	-	-	-	-	
B. Pol. Products								
I. Light Distillates	2124	847.90	2870	1341.18	3017	1555.42	2643	1737.45
1. Naphtha	1520	621.87	2249	1061.40	2461	1294.26	2184	1443.83
2. LPG	(Included	in others)	12	9.90	17	17.34	22	23.70
3. Others	604	226.03	609	269.88	539	243.82	437	269.92
II. Middle Distillates	161	65.96	352	231.25	396	265.50	437	313.64
1. HSD/LDO	82	31.54	182	119.49	209	138.30	216	150.86
2. Others	79	34.42	170	111.76	187	127.20	221	162.78
III. Heavy Ends	363	90.06	32	14.95	22	11.01	82	28.56
1. FO/LSHS	357	88.50	29	10.58	22	10.71	82	28.20
2. Others	6	1.56	3	4.37	Neg.	0.30	Neg.	0.36
TOTAL (B)	2648	1003.92	3254	1587.38	3435	1831.93	3162	2079.65
GRAND TOTAL (A+B)	2648	1003.92	3254	1587.38	3435	1831.93	3162	2079.65
NET IMPORTS								
A. Crude Oil	20699	6118.42	27349	10316.03	27342	11517.00	33906	18538.19
B. Pol. Products	6012	3656.29	10697	5934.33	16900	10745.92	17103	13553.84
GRAND TOTAL	26711	9774.71	38046	16250.36	44242	22262.92	51009	32092.03

*: Provisional. @: Includes NOC Imports.

@@: Includes supplies of POL Products to Nepal.

VII. 5 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 Preceding 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	11.7	76	182	-106	-23.2	44.4	4.7	10.0
1972-73	1971	1867	104	22.6	2.3	94	200	-106	23.7	9.9	4.8	10.7
1973-74	2523	2955	-432	28.0	58.3	187	532	-345	98.9	166.0	7.4	18.0
1974-75	3329	4519	-1190	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	35.5	6.0	15.7	22.1
1976-77	5142	5074	+68	27.4	-3.6	707	1296	589	11.7	11.1	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	4.6	37.3	745	3488	-2743	3.9	44.7	11.1	27.8
1981-82	7806	13608	-5802	16.3	8.4	940	3770	-2830	26.2	8.1	12.0	27.6
1982-83	8803	14293	-5490	12.8	5.0	820	3899	-3079	-12.8	3.4	9.8	27.2
1983-84	9771	15831	-6060	11.0	10.8	882	3225	-2343	7.6	17.3	9.0	20.4
1984-85	11744	17134	5390	20.2	8.2	944	3326	2282	7.0	3.1	8.0	19.0
1985-86	10895	19658	-8763	-7.2	14.7	835	3420	-2585	-11.5	2.8	7.7	17.8
1986-87	12452	20096	-7644	14.3	2.2	831	1792	-961	-0.5	-47.6	6.7	8.9
1987-88	15674	22244	-6570	25.9	10.7	980	3319	-2339	17.9	85.2	6.3	14.9
1988-89	20232	28235	-8003	29.1	26.9	1207	3681	-2474	23.2	10.9	6.0	13.0
1989-90	27658	35328	7670	36.7	25.1	1841	5074	-3233	52.5	37.8	6.7	14.3
1990-91	32553	43198	-10645	177	22.3	1831	7041	-5210	-0.5	38.8	5.6	16.3
1991-92	44041	47851	-3810	35.3	10.8	3852	9499	-5647	110.4	34.9	8.7	19.9
1992-93	53688	63375	-9687	21.9	32.4	5180	13690	8510	34.5	44.1	9.6	21.6
1993-94	69751	73101	-3350	29.9	15.3	7473	16377	-8904	44.3	19.6	10.7	22.4
1994-95	82674	8997	-7297	18.5	23.1	7631	19002	-11371	2.1	16.0	9.2	21.1
1995-96	106353	122678	-16325	28.6	36.4	10300	25586	-15286	35.0	34.6	10.7	20.9
1996-97	117525	136844	-19319	10.5	11.5	11365	36188	-24823	10.3	41.4	9.7	26.4

(P): Provisional Source: (i) Ministry of Commerce (ii) Economic Survey.

VII. 6 INDIA'S FOREIGN EXCHANGE RESERVES (1970-71TO 1996-97)

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
1975-76	202.8	182.53	1491.70
1976-77	187.4	187.80	2862.99
1977-78	161.6	193.00	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	270.2	225.58	4265.26
1983-84	216.4	225.58	5497.9
1984-85	146.5	245.76	6818.78
1985-86	115.1	274.28	7384.35
1986-87	139.4	274.28	7645.17
1987-88	69.7	274.28	7287.14
1988-89	79.5	274.28	6604.60
1989-90	81.9	280.70	5787.20
1990-91	75.9	6828.30	4388.10
1991-92	65.7	9038.0	14578.0
1992-93	12.7	10548.80	20140.5
1993-94	76.5	12794.10	47287.0
1994-95	4.6	13751.80	66006.0
1995-96	55.9	15658.5	58446
1996-97	1.4	14557.2	80368

SOURCE: Economic Survey/Ministry of Finance.
Gold is valued at Rs. 53.58 per 10 grams upto May 1966 and at Rs. 84.39 per 10 grams upto September 1990 and closer to international market price w.e.f. October 17, 1990.

VII. 7 INDIA'S POL IMPORTS AS A PROPORTION TO OVERALL EXPORTS FROM THE COUNTRY 1970-71TO 1996-97

(Rs. Crores)

YEAR	POL Imports		India's Total Exports		Gross POL	Net POL
	Gross	Net	Gross	Net of POL Exports	Imports as % age of total Gross Exports	Imports as % age of total Net Exports
1	2	3	4	5	6	7
1970-71	137	132	1535	1530	8.9	8.6
1975-76	1256	1242	4036	4022	31.1	30.9
1976-77	1424	1417	5142	5135	27.7	27.6
1977-78	1552	1546	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	5191	4978	7806	7594	66.5	65.6
1982-83	5598	4401	8803	7606	63.6	65.6
1983-84	4812	3224	9771	8183	49.2	39.4
1984-85	5345	3527	11744	9926	45.5	35.5
1985-86	4961	4316	10895	10250	45.5	42.1
1986-87	2773	2362	12452	12041	22.3	19.6
1987-88	4011	3362	15874	15025	25.6	22.4
1988-89	4421	3897	20232	19708	21.9	19.8
1989-90	6344	5648	27681	26962	22.9	20.9
1990-91	10779	9775	32563	31549	33.1	31.0
1991-92	13038	11824	44041	42826	29.6	27.6
1992-93	17046	15439	53688	52062	31.8	29.6
1993-94	17730	16221	69751	68242	25.4	23.8
1994-95	17838	16250	82674	81087	21.6	22.5
1995-96	24095	22263	106353	104521	22.7	21.3
1996-97	34172	32092	117525	115445	29.1	27.8

Source: For col. 4: Ministry of Commerce, DGCI & S, Calcutta. (P): Provisional.

VIII. 1 NUMBER OF PERSONS EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(Number)

CATEGORY	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Exploration & Production	31413	48700	56477	58187	58627	58864	58590	57633	50244	48585
2. Refining	15334	23074	25751	26479	29668	23386	22589	23031	24622	20723
3. Marketing	19920	27717	36261	33074	35353	38414	39255	34270	37321	38744
4. Pipelines	2215	2901	3189	3579	3711	3312	3654	3619	3712	3934
5. R & D	-	-	-	-	-	3035	3048	2953	2935	2901
6. Others	3415	4480	8268	8359	8448	14340	14859	14929	20770	21958
Grand Total	72297	106872	129946	129678	135793	141351	141495	136435	139604	136845

VIII. 2 CATEGORY-WISE NUMBER OF PERSONS EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(Number)

CATEGORY	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Executive/Managerial	9311	21108	31178	32446	35848	39434	40479	40282	41460	40770
2. Supervisory	6512	10452	12229	12744	11713	9623	9593	9245	8467	12295
3. Clerical	12408	15878	17254	15993	17511	17633	16388	16934	16102	15520
4. Workmen	44057	59313	65475	63795	65479	66201	66656	64722	65045	61174
5. TOTAL	72283	106731	126136	124978	130551	132891	133116	131183	131074	129759
6. Eexpatriates/ Foreign Experts/ on Contract	14	141	3810	4700	5242	8460	8379	5252	8530	7086
GRAND TOTAL	72297	106872	129946	129678	135793	141351	141495	136435	139604	136845

Note: Staff Employed as on 1st April of each year

VIII. 3 CATEGORY-WISE NUMBER OF PERSONS EMPLOYED IN VARIOUS SECTORS OF PETROLEUM INDUSTRY IN INDIA

(Number)

CATEGORY	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
EXPLORATION AND PRODUCTION										
1. Executive/Managerial	3394	10183	15864	17473	18944	17447	17327	17555	17636	17318
2. Supervisory	1894	4537	5594	6040	1992	4794	4948	4279	3272	4865
3. Clerical	3795	5438	4749	4728	4689	4625	4281	4532	3870	3526
4. Workmen	22216	28401	28712	28610	28628	31156	30941	30295	25400	22793
5. TOTAL	31339	48559	54919	56851	57253	58022	57497	56661	50178	48502
6. Expatriates/ Foreign Experts/Contract	14	141	1558	1336	1374	842	1093	972	66	83
GRAND TOTAL	31413	48700	56477	58187	58627	58864	58590	57633	50244	48585
PETROLEUM REFINING @										
1. Executive/Managerial	2055	3878	5009	5287	6261	4527	4437	4271	5450	4236
2. Supervisory	1050	1648	1216	1471	1653	1432	889	1195	642	1719
3. Clerical	1791	2728	3427	3256	4514	2773	1938	2479	2129	2033
4. Workmen	10438	14820	14995	14856	15649	12012	12260	11893	12546	11144
5. TOTAL	15334	23074	24647	24870	28077	20744	19544	19838	20767	19132
6. Expatriates/ Foreign Experts/Contract	-	-	1104	1609	1579	2642	3045	3193	3855	1591
GRAND TOTAL	15334	23074	25751	26479	29656	23386	22589	2301	24622	20723
MARKETING										
1. Executive/Managerial	3318	6047	8586	7884	8644	8526	9327	8678	8978	9623
2. Supervisory	1591	1441	2222	2041	1851	2061	2210	2314	2482	2721
3. Clerical	5820	6533	7030	5746	5984	6085	6214	5566	5392	5428
4. Workmen	9191	13696	17302	15716	16644	16912	17753	17291	17216	17719
5. TOTAL	19920	27717	35140	31387	33123	33584	35504	33849	34068	35491
6. Expatriates/ Foreign Experts/Contract	-	-	1121	1687	2230	4830	3751	421	3253	3253
GRAND TOTAL	19920	27717	36261	33074	35353	38414	39255	34270	37321	38744

@: Includes IOC's Head Office, Regional Office.

IX.1 WHOLESALE AVERAGE PRICE INDICES OF PETROLEUM PRODUCTS, ENERGY ITEMS & ALL COMMODITIES IN INDIA
(Financial Year Averages)

(1981-82 = 100)

Year	Petroleum	Petroleum Products									Energy Items				All
	Crude & Natural Gas	Petrol/ Mogas	Kero-sene	ATF	H.S.D.	L.D.O.	FO	Lubri-cants	Naph-tha	Bitu-men	Coal Mining	Coke	Lig-nite	Elec-tricity	Commo-dities
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1982-83	103.1	102.4	101.1	104.1	103.3	102.9	102.9	102.1	101.2	103.1	115.9	127.0	116.5	111.5	104.9
1983-84	99.6	103.3	106.6	109.2	108.7	107.2	104.9	103.2	108.2	101.7	128.2	137.5	142.1	120.5	112.8
1984-85	103.0	104.5	109.4	116.3	108.5	109.1	106.1	104.3	110.2	102.2	155.1	153.2	180.8	124.8	120.1
1985-86	103.0	120.6	121.8	128.5	117.0	124.5	121.3	120.9	127.5	116.8	159.1	155.0	189.0	139.6	125.4
1986-87	99.3	122.0	129.9	139.7	120.2	124.5	121.3	124.2	135.1	116.8	174.5	162.2	193.2	153.5	132.7
1987-88	93.5	130.6	129.9	142.6	122.1	124.5	121.4	123.9	123.7	116.8	183.0	162.2	197.3	176.6	154.2
1988-89	89.1	145.2	129.9	139.7	119.8	124.5	121.6	148.3	130.1	117.9	212.3	162.2	197.3	176.6	154.2
1989-90	91.8	146.0	129.9	140.9	120.0	124.9	121.5	152.2	131.0	117.9	231.8	162.2	218.9	187.7	165.7
1990-91	99.6	187.3	144.3	193.7	155.2	139.1	134.7	182.1	133.3	125.8	232.6	162.2	242.9	200.9	182.7
1991-92	101.0	238.8	150.8	247.3	173.0	166.1	160.5	226.5	145.6	146.5	249.9	177.4	255.2	222.8	207.8
1992-93	102.7	263.9	146.7	278.6	195.9	197.0	188.5	275.5	178.3	172.8	301.2	221.6	287.8	249.0	228.7
1993-94	120.7	275.9	146.7	290.5	216.4	223.3	207.8	330.0	201.9	190.7	346.4	252.6	287.8	318.2	247.8
1994-95	129.1	293.5	146.7	290.5	235.2	243.1	206.8	337.9	201.9	190.7	364.0	264.6	306.5	352.6	274.7
1995-96	130.2	293.5	146.7	289.7	235.1	242.9	206.6	342.6	201.9	190.7	368.1	267.2	321.2	369.7	295.8
1996-97	132.1	361.2	147.9	311.2	261.3	296.9	250.0	385.6	245.5	204.4	416.8	267.2	336.4	413.2	314.6

Source: Ministry of Industry, Office of the Economic Advisor.

IX.2 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	1.4.84	1.3.87	1.4.87	1.2.89	1.4.90	16.9.92	1.4.93	1.4.1996
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(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	138.54	138.54	138.54	138.54	138.54	204.34	236.23	270.15
2. Conversion factor	Bbl/MT	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37	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	203.41	1021.00	1021.00@@	1021.00	1021.00	1021.00	1021.00	1506.00	1741.00	1991.00
4. Oil Development Cess	Rs/MT	@	60.00	60.00	60.00	100.00	300.00	300.00	300.00	600.00	600.00	900.00	900.00	900.00	900.00
5. Royalty	Rs/MT	@	@	42.00	61.00	61.00#	61.00#	192.00	192.00	314.00	314.00	481.00	481.00	528.00	578.00
6. Total Price (including cess & royalty)	Rs/MT	270.04	305.41	305.41	324.41	1182.00#	1382.00#	1513.00	1813.00	1935.00	2235.00	2402.00	2887.00	3169.00	3469.00
(ii) Off shore Crude Oil															
1. Base Price as fixed by the Govt.	Rs/Bbl			45.00	45.00	138.54	138.54	138.54	138.54	138.54	138.54	138.54	204.34	236.23	270.15
2. Conversion factor	Bbl/MT			7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37
3. Base Price	Rs/MT			331.65	331.65	1021.00	1021.00	1021.00	1021.00	1021.00	1021.00	1021.00	1506.00	1741.00	1991.00
4. Oil Development Cess	Rs/MT			60.00	60.00	100.00	300.00	300.00	600.00	900.00	900.00	900.00	900.00	900.00	900.00
5. Royalty	Rs/MT			42.00	61.00	61.00	61.00	192.00	192.00	314.00	314.00	481.00	481.00	528.00	578.00
6. Total Price	Rs/MT			433.65	452.65	1182.00#	1382.00#	1513.00	1813.00	1935.00	2235.00	2402.00	2887.00	3269.00	3469.00

* Inclusive of royalty @ Rs. 15?MT and Oil Development Cess @ Rs. 60/MT **Inclusive of royalty @ Rs. 42/MT

@ Included in the base price.

@@ Fixed retrospectively w.e.f. 1.4.1984.

\# Shows price fixed by the Government inclusive of royalty and Oil Development Cess.

Note: Upto 31.3.84. Applicable sales tax on ex-central tank farm price of crude oil of 34 API was borne by the producer.
The applicable Sales Tax on the increase of Rs. 131/MT and Rs. 122/MT in the rate of royalty w.e.f. 1.4.84 and 1.4.87 resepctively and increase of cess of Rs. 300/MT w.e.f. 1.3.87 and Rs. 300/MT w.e.f. 1.2.89 is being borne by pool account.

IX.3 DEVELOPMENT OF BASIC CEILING SELLING PRICES (EX-STORAGE POINT) OF PETROLEUM PRODUCTS

(Rs./Selling Unit)

Product	Selling	Prior to	Effective Date																
	Unit	17.8	17.8	8.6	13.1	11.7	15.2	17.3	1.2	6.2	20.3	9.1	1.3	20.3	15.10	25.7	16.9	2.2	1.3	7.7
		1979	1979	1980	1981	1981	1983	1985	1986	1986	1987	1988	1988	1990	1990	1991	1992	1994	1994	1996
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
ATF (Domestic)	KL	1377	2117	3217	2537	2872	4122	4740	5240	5240	5240	5240	5240	6560	8200	9840	10838	10838	9852	10838
MS 83/87	"	3538	3888	4538	4908	5438	5438@	6369	6869	6769	6769	7694	7845	8944	11180	13416	14413	15413	12844	16055
MS 93	"	3693	4043	4693	5063	5593	5593	6421	6424	6824	6824	7749	7901	10944	13680	16416	17413	18413	15344	19180
HSDO	"	1209	1377	1960	2330	2650	2850	3078#	3188	3116	3116	3096	3096	3634	4542	4542	5539	6289	5717	6575
SKO (Domestic)	"	1194	1364	1295	1395	1545	1545	1822#	2047	1957	1957	1957	1957	1957	2446	2202	2202	2202	2001	2001
LDO	"	887	1207	1857	2227	2506	2656	3054	3054	3054	3054	3054	3054	3054	3817	4199	5396	6146	558	7264
FURNACE OIL																				
For non-ferts	"	889	1209	1659	2189	2424	2524	2903	2903	2903	2903	2903	2903	2903	3629	3992	4989	4989	4535	5896
For Fert.	"	829	829	829	1039	1274	1274+	1320	1320	1320	1320	1320	1320	1320	1650	1815	2812	2812	2812	3656
LSHS	MT													1349	1686	1854	2852	2852	2852	3707
For Non-ferts*	"													2769	3461	3807	4804	4804	4804	6245
BITUMEN ST. GR.																				
Bulk	MT	676	1176	1826	2061	2323	2196	2575	2575	2575	2575	2575	2575	2575	3219	3540	4538	4538	4125	5363
Packed		961	1461	2111	2346	2608	2696	3100	3100	3100	3100	3100	3100	3100	3875	4262	5259	5259	4781	6216
NAPHTHA																				
For non ferts-	MT	1012	2482	2692	2792	2792	2792	3211	3211	3211	3211	3211	3211	3211	4014	4415	6076	6076	6076	6683
Forferts	"	596	596	1071	1371	1723	1982	1982	1982	1982	1982	1982	1982	1982	2478	2726	3723	3723	3723	4840
LPG (PACKET)																				
Domestic	MT	1633	1966	1966	2301	2634	2634	3029	3729	3449	3449	3449	3449	3449	3449	4139	5136	5840	5309	6702
Non-Dom.Ess	"	1927	2260	2260	2595	2928	2928	3978	3978	3978	5001	5001	5001	5001	6251	6877	12588	12588	11493	$$
Non-Dom. Non-Ess	"	-	-	-	-	-	-	-	5128	5128	5128	6151	6151	6151	6151	7689	8458	14169	14169	12881	13900

Note: (1) Prices have been rounded to nearest Rupee.

(2) w.e.f. 1.10.1986 the product JBO, SBP 64/69, Hexane, MTO-140/205, MTO Laws have been kept outside the pricing scheme. LSHS has been brought under the pricing scheme.

** w.e.f. 1.3.1994, C.E. duty on all petroleum products would be on advolorem basis with only two rates-Motor Spirit and Coal Tar would attract 20% duty. All other petroleum products would be charged at central excise duty at 10%.

" = 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.

$$ = The two categories under non-domestic LPG (Packed) for essential and non-essential have been merged together with a price of Rs. 12881/MT.

IX.4 PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1.4.1997

(Rs./Kl)

	DELHI	KANPUR	CALCUTTA	MUMBAI	CHENNAI
			MOTOR SPIRIT 87		
Ex-MI Price	19486.75	19577.11	19698.55	19790.63	20023.56
Entry/Toll/Del. CGS.	-	-	-	-	-
Sales Tax	1558.94	2740.79	2265.33	4156.03	4004.71
Shrinkage/Octroi	-	-	-	-	200.24
SC on S.T.	-	-	-	-	600.71
Dealers Comm.	80.00	80.00	80.00	80.00	80.00
TOTAL Rs/Kl	21125.69	22397.90	22043.88	24026.66	24909.22
R.S.P. Rs/LTR	21.13	22.40	22.05	24.03	24.91
			HIGH SPEED DIESEL OIL		
Ex-Depot Rate	7380.16	7416.45	7384.23	7400.17	7470.45
Entry/Toll/Transi	-	-	-	-	-
CST	-	-	-	-	-
Sales Tax	590.41	1186.63	886.11	1554.04	1344.68
SC on S.T.	-	-	-	-	-
Addl. Tax/Cess	-	-	-	-	-
Dealers Comm.	40.00	40.00	40.00	40.00	40.00
Shrinkage/Octroi	-	-	-	-	-
TOTAL Rs/Kl	8010.56	8643.08	8310.34	8994.21	8855.13
R.S.P. Rs/LTR	8.02	8.65	8.32	9.00	8.86
			LIGHT DIESEL OIL		
Basic Price	7263.82	7263.82	7263.82	7263.82	7263.82
State Surcharge	25.00	5.00	82.17	121.28	175.49
Siding/SHTG CGS	0.69	7.76	-	-	-
Rly FRT/FRT Differential	113.14	177.76	22.60	-	-
Toll Tax	-	-	-	-	-
Assessable Value	7289.51	7276.58	7345.99	7385.10	7439.31
Excise Duty	728.95	727.66	734.60	738.51	743.93
Sub Total	8131.60	8182.00	8103.19	8123.61	8183.24
Depot Rate Rs/Kl	8131.60	8182.00	8103.19	8123.61	8183.24
Rate of ST	8%	16%	10.91%	8%	16%
Rate of SC on ST			10%		15%
Rate of Addl. SC on ST					5%

Contd.....

IX.4 Contd. PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES IN MAJOR CITIES AS ON 1.4.1997

(Rs./Kl)

	DELHI	KANPUR	CALCUTTA	MUMBAI	CHENNAI
			SUPERIOR KEROSENE OIL		
EX-DEPOT RATE	2290.93	2389.37	2265.43	2265.69	2293.55
SALES TAX/CST	68.73	238.94	113.27	-	68.81
SC ON Sales Tax/Addl. Tax	-	-	-	-	68.81
Transportation Charge	-	-	-	-	3.44
Leakage 1% @	2359.66	2628.31	2378.70	2265.69	2376.12
Depreciation Per KL	95.57	70.00	60.00	120.00	33.00
Wholesale Mgn./Dealer Comm.	14.50	52.70	14.50	52.70	8.00
Unload/Load CGS/OCTROI	-	-	-	-	-
Handling Charges	-	-	7.20	19.50	23.76
Other Expenses/Adj. Price	31.00	-	31.00	2.11	24.00
Agency Commission per Kl					
Godown rent/Est. Charges					
Wholesale Price	2500.73	2751.01	2491.40	2460.00	2464.88
Retailer Margin	-	-	107.93	-	-
R. Price/Local Transport	-	100.00	130.00	21.00	-
Other Incidental Charges	69.00	-	69.00	69.00	335.10
R.S.P. Rs/Kl	2569.73	2851.01	2798.33	2550.00	2799.98
R.S.P. Rs/Ltr	2.57	2.85	2.80	2.55	2.80
	LIQUIFIED PETROLEUM GAS (RS./14.2 KG. CYL.)				
Basic Price	103.53	103.53	103.53	103.53	103.53
State surcharge	0.37	-	1.21	0.81	2.59
Asse Value	103.90	103.53	104.74	104.34	106.12
Excise Duty	10.39	10.35	10.47	10.43	10.61
Freight Upto BP	1.90	3.05	2.37	-	
Octroi					
Price At pricing PT	116.19	116.93	117.58	114.77	116.73
Frt/Local Delivery Charge	0.75	0.75	0.75	0.75	0.75
Octroi/T.Tax	-	-	-	1.08	-
Sub Total	116.94	117.68	118.33	116.60	117.48
CST/Sales Tax	5.85	9.41	20.12	4.66	9.40
Surcharge on ST	-	2.35	2.01	-	-
Billable Rate	122.79	129.44	140.46	121.26	126.88
Distributors Commission	3.37	3.37	3.37	3.37	3.37
Sub Total	126.16	132.81	143.83	124.63	130.25
Addl Tax					
Last Point Sales Tax	-	-	-	-	
Surcharge on ST	-	-	-	-	-
R.S.P. for 15 Kg. Cyl.	126.16	132.81	143.83	124.63	130.25
R.S.P. For 14.2 Kg. Cyl.	119.43	125.73	136.16	117.98	123.31
Incr In Dc	0.50	0.50	0.50	0.65	0.81
Rsp for 14.2 Kg/Cyl119.93	119.93	126.23	136.66	118.63	124.12
Price Rounded to Re. 0.05 Paise	119.95	126.25	136.65	118.60	124.10

Contd.....

IX. 4 Contd. PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1.4.1997

(Rs./Kl)

	DELHI	KANPUR	CALCUTTA	MUMBAI	CHENNAI
		ATF (DEMESTIC AIRLINES)			
Basic Price	10837.56	10837.56	10837.56	10837.56	10837.56
State Surcharge	25.00	-	192.57	272.82	411.25
Mi Shun/Sdg. Cgs.	0.63	7.07	-	-	-
Air Field Charge	41.94	41.94	24.44	24.44	24.44
Rly. Frt/Frt Diff.	109.61	173.19	20.39	-	-
Assessable value	10905.13	10886.57	11074.96	11134.82	11273.25
Excise Duty	1090.51	1088.66	1105.46	1113.48	1127.33
BMC Octroi/Toll Tax	-	10.00			
Sub Total	12105.25	12158.42	12180.42	12248.30	12400.58
Posted Air field price	12105.25	12158.42	12180.42	12248.30	12400.58
Salex Tax	968.42	1702.28	3045.11	3674.49	2976.14
Addl Tax			304.51		
Total	13073.67	13860.60	15530.04	15922.79	15376.72
Rate of Sales Tax%	8%	14%	25%	30%	24%
Addl Tax%			10%		
		ATF (INTERNATIONAL AIRLINES) US$/KL			
Basic price	262.85		262.85	262.85	262.85
Entry Tax/Local Levies	-		-	-	-
Sales Tax	21.03		65.71	78.86	63.08
SC on Sales Tax	-		-	-	-
Addl. SC on ST	-		6.57	-	-
Total For non-Sch. Airines	283.88		335.13	341.71	325.93
Basic Price				262.85	
Sales Tax	8%		25%	52.57	
Addl Tax			10%	20%	24%
Total for Sch. Foreign Airlines	283.88		335.13	315.42	325.93
Non-Sch. Passenger Aircraft					
Rate of Sales Tax	8.00		25.00	-	20.00
Addl. Tax			10.00	-	5.00
Entry Tax				-	5.00
		FUEL OIL			
Basic Price	5895.86		5895.86	5895.86	5895.86
State Surcharge	25.00		78.11	115.41	166.82
MI SDG./SHIG. charges	0.75		-	-	-
Rly FRT/FRT Diferential	145.93		24.31	-	-
Assesable Value	5921.61		5973.97	6011.27	6062.68
Excise Duty	592.09		597.40	601.13	606.27
Ex Depot Price	6513.70		6571.37	6612.40	6668.95
Octroi	-		-	-	-
Entry Tax	-		-	-	-
Sub Total	6659.63		6595.68	6612.40	6668.95
Deport rate RS/Kl	6659.63		6595.68	6612.40	6668.95
Rate of ST	7%		8%	8%	12%
Rate of SC on ST			10%		15%
Rate of Addl. SC					5%
Rate of Octroi					

IX. 5 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)				
01.01.1973	1.43	1.46	1.44	1.41	1.47
01.01.1974	2.81	2.82	2.78	2.69	2.73
01.01.1975	3.26	3.27	3.27	3.19	3.35
01.01.1976	3.36	3.39	3.39	3.30	3.47
01.01.1977	3.39	3.38	3.39	3.29	3.48
01.01.1978	3.38	3.38	3.39	3.29	3.48
01.01.1979	4.04	4.04	4.04	4.90	4.14
07.08.1979	4.43	4.42	4.41	4.25	4.52
08.06.1980	5.15	5.14	5.11	4.90	5.22
13.01.1981	5.56	5.54	5.50	5.29	5.62
11.07.1981	6.15	6.13	6.07	6.17	6.19
01.04.1982	6.15	6.13	6.07	6.17	6.19
15.02.1993	6.21	6.16	5.90	6.17	6.25
01.04.1993	6.21	6.31	5.99	6.16	6.15
01.04.1984 (Ms-87 on)	6.32	6.24	6.09	6.44	6.26
01.06.1984	6.41	6.24	6.12	6.44	6.26
17.03.1985	7.34	7.16	7.00	7.39	7.16
01.02.1986	7.90	7.71	7.54	7.96	7.85
06.02.1986/01.04.1986	7.79	7.60	7.43	7.84	7.74
01.04.1987	7.79	7.60	7.43	7.84	7.85
01.04.1988	9.14	8.70	8.50	8.98	8.93
01.04.1989	9.14	8.70	8.50	9.43	8.93
01.04.1990 (Ms-87)	10.76	10.07	9.84	11.09	10.31
01.04.1991	13.74	12.53	12.23	13.81	12.73
01.04.1992	16.71	15.48	14.62	17.17	15.19
01.04.1993	17.91	16.59	15.71	18.74	16.35
01.03.1994	19.11	17.70	16.78	19.98	17.45
08.04.1995	19.26	17.68	16.80	19.98	18.12
01.04.1996	19.26	17.67	16.95	19.98	18.12
01.04.1997	24.03	22.05	21.13	24.91	22.40
	HIGH SPEED DIESEL OIL (RS./LITRE)				
01.01.1973	0.83	0.90	0.86	0.87	0.88
01.01.1974	0.81	0.87	0.84	0.88	0.87
01.01.1975	1.06	1.10	1.11	1.15	1.15
01.01.1976	1.28	1.35	1.36	1.36	1.32
01.01.1977	1.27	1.36	1.34	1.35	1.33
01.01.1978	1.27	1.36	1.34	1.35	1.33
01.04.1979	1.39	1.49	1.47	1.49	1.50
17.08.1979	1.58	1.68	1.66	1.66	1.69
11.09.1979	1.50	1.60	1.58	1.59	1.61
08.06.1980	2.21	2.25	2.28	2.24	2.34
13.01.1981	2.61	2.66	2.67	2.66	2.76
11.07.1981	2.98	3.01	3.02	3.05	3.11
01.04.1982	2.96	3.01	3.02	3.05	3.11
15.02.1983	3.21	3.31	3.18	3.27	3.46
01.04.1983	3.21	3.30	3.19	3.26	3.40
01.04.1984	3.21	3.30	3.20	3.34	3.42
01.06.1984	3.27	3.30	3.22	3.34	3.42
17.03.1985	3.52	3.35	3.47	3.60	3.70
26.03.1985	3.45	3.48	3.39	3.52	3.60
01.02.1986	3.64	3.68	3.58	3.73	3.81
06.02.1986/01.04.1986	3.57	3.60	3.50	3.65	3.73
01.04.1987	3.21	3.30	3.19	3.26	3.40
01.04.1988	3.21	3.30	3.19	3.26	3.40
01.04.1989	3.21	3.30	3.19	3.26	3.40
01.04.1990	4.30	4.20	4.08	4.36	4.44
01.04.1991	5.62	5.20	5.05	5.42	5.42
01.04.1992	5.68	5.31	5.05	5.72	5.42
01.04.1993	6.88	6.43	6.17	6.91	6.54
01.03.1994	7.78	7.27	6.98	7.80	7.38
08.04.1995	7.84	7.25	6.99	7.80	7.69
1.4.1996	7.84	7.24	6.99	7.80	7.68
1.4.1997	9.00	8.32	8.02	8.86	8.65

Contd.....

IX. 5 Contd. 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)				
01.01.1973	0.61	0.65	0.65	0.65	0.74
01.01.1974	0.82	0.84	0.82	0.85	0.86
01.01.1975	1.01	1.05	1.08	1.10	1.25
01.01.1976	1.21	1.25	1.29	1.31	1.39
01.01.1977	1.21	1.24	1.29	1.31	1.34
01.01.1978	1.18	1.24	1.30	1.31	1.34
01.04.1979	1.29	1.38	1.43	1.43	1.47
01.06.1979	1.46	1.56	1.61	1.62	1.66
01.09.1979	1.39	1.49	1.54	1.56	1.59
08.06.1980	1.39	1.49	1.54	1.55	1.59
13.01.1981	1.49	1.60	1.65	1.67	1.70
11.07.1971	1.60	1.76	1.81	1.84	1.90
01.04.1982	1.66	1.80	1.81	1.78	1.90
15.02.1980/Subsidised	1.70	1.80	1.77	1.78	1.90
Non-subsidised	3.00	3.12	3.10	3.15	3.35
18.03.1983	1.80	1.91	1.88	1.89	2.10
01.04.1983	1.80	1.90	1.88	1.88	2.05
01.04.1984	1.81	1.92	1.89	1.88	2.05
01.06.1984	1.85	1.92	1.92	1.88	2.05
17.03.1985	2.10	2.18	2.18	2.08	2.25
26.03.1985	2.03	2.12	2.11	2.08	2.25
01.02.1986	2.66	2.36	2.34	2.34	2.50
06.02.1986/01.04.1986	2.17	2.27	2.25	2.25	2.50
01.04.1987	2.17	2.27	2.25	2.25	2.50
01.04.1988	2.14	2.27	2.25	2.25	2.50
01.04.1989	2.17	2.27	2.25	2.29	2.50
01.04.1990	2.17	2.27	2.25	2.29	2.50
01.04.1991	2.66	2.90	2.77	2.95	3.04
01.04.1992	2.44	2.70	2.52	2.80	2.78
01.04.1993	2.44	2.75	2.54	2.80	2.78
01.03.1994	2.53	2.80	2.58	2.80	2.78
08.04.1995	2.55	2.80	2.57	2.80	2.85
01.04.1996	2.55	2.80	2.58	2.80	2.85
01.04.1997	2.55	2.80	2.58	2.80	2.80
	LIQUIFIED PETROLEUM GAS (RS./. CYLINDER)				
	14.2Kg. cyl	15 Kg. cyl	15 Kg. cyl	15 Kg. cyl	15 Kg. cyl
01.01.1975	22.10	27.79	27.36	23.91	27.61
01.01.1976	26.75	33.31	32.61	29.36	32.85
01.01.1979	26.94	37.06	34.98	38.90	35.42
17.08.1979	33.96	42.93	40.43	37.32	40.82
08.06.1968	33.96	42.93	40.23	37.81	40.82
13.08.1981	38.94	49.09	45.53	-	46.26
11.07.1981	43.52	54.84	50.78	48.74	53.06
01.04.1982	43.52	54.84	50.78	48.74	53.06
01.09.1982	43.14	51.93	44.58@	47.17	49.41
01.04.1983	43.14	51.71	45.09@	47.17	50.41@
01.04.1984	43.14	52.71	45.09@	44.65@	47.72@
01.06.1984	44.41	49.90@	45.47@	44.65@	48.81@
17.03.1985	49.95	56.34@	51.35@	50.74@	54.89@
01.02.1986	60.28	67.77@	61.79@	61.56@	65.90@
06.02.1986/01.04.1986	56.15	63.20@	57.61@	57.24@	61.56@
01.04.1987	56.15	63.20@	57.61@	57.24@	61.56@
01.04.1988	56.15	63.20@	57.61@	57.24@	61.56@
01.04.1989	56.15	63.20@	57.61@	57.24@	61.56@
01.04.1990	56.15	63.20@	57.61@	57.44@	61.56@
01.04.1991	56.15	63.20@	57.61@	57.44@	60.64@
01.04.1992	66.81	77.20@	67.90@	71.06@	71.43@
01.04.1993	81.54	93.81@	82.57@	86.58@	87.01@
01.03.1994	91.94	105.52@	93.07@	97.55@	98.00@
10.04.1995	91.94	105.27@	93.28@	97.55@	98.37@
1.4.1996	94.40	107.00	93.08	98.05	98.90
1.4.1997	118.60	136.65	119.95	124.10	126.25

@: For 14.2 Kg. Cylinder

IX.6 RATES OF DEALERS COMMISSION FOR MS, HSDO AND LPG IN INDIA

Effective from	(.....Motor Spirit.....) (Rs./Kl) Slab of annual volume of sale (Kl Annual)						(.....High Speed Diesel Oil.....) Rs./Kl) Slab of annual volume of sales (Kl Annual)						LPG (Rs/cylinder)		
	Effective from 1.7.1982				Effective from 1.9.1993		Effective from 1.7.1982				Effective from 1.9.1993			Upto 2500 refill p.m.	Above 2500 refills p.m.
	0-360	361-600	601-1080	Over 1080	0-600	Above 600	0-360	361-600	601-1080	Over 1080	0-600	Above 600			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.3.1982	-	-	-	-	-	-	-	-	-	-	-	-	3.62	-	-
1.10.1982	134	98	86	69	-	-	79	58	42	36	-	-	-	-	-
15.2.1983	-	-	-	-	-	-	81	60	43	37	-	-	-	-	-
1.9.1983	135	99	87	70	-	-	-	-	-	-	-	-	-	-	-
17.3.1985	146	108	95	76	-	-	83	62	44	38	-	-	-	-	-
6.2.1986	151	113	99	79	-	-	84	63	45	39	-	-	-	-	-
19.1.1987	-	-	-	-	-	-	-	-	-	-	-	-	5.30	-	-
9.1.1988	184	124	109	87	-	-	-	-	-	-	-	-	-	-	-
21.10.1989	234	165	148	128	-	-	129	87	69	63	-	-	-	-	-
20.3.1990	250	179	160	138	-	-	135	92	72	68	-	-	-	-	-
15.10.1990	279	204	182	155	-	-	145	101	77	70	-	-	-	-	-
17.5.1991	-	-	-	-	-	-	-	-	-	-	-	-	5.70	-	-
25.7.1991	311	233	206	172	-	-	-	-	-	-	-	-	-	-	-
16.9.1992	321	240	214	180	-	-	155	111	83	75	-	-	5.70	-	-
1.4.1993	381	277	248	217	-	-	186	128	101	92	-	-	5.70	-	-
1.9.1993	-	-	-	-	363	224	-	-	-	-	190	90	-	7.30	6.50
2.2.1994	-	-	-	-	363	224	-	-	-	-	195	90	-	7.30	6.50
1.4.1994	-	-	-	-	376	232	-	-	-	-	196	93	-	7.30	6.50
1.4.1995	-	-	-	-	378	233	-	-	-	-	197	93	-	7.80@	6.95@@
1.4.1996	-	-	-	-	380	234	-	-	-	-	197	93	-	8.05@	7.15@@
7.7.1996	-	-	-	-	387	238	-	-	-	-	200	94	-	8.05@	7.15@@

@ Exclusive of demand draft charges.

Note: Therates 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)	MS (Rs./Kl)	HSDO (Rs./Kl)
Up to 360	80	50
36 to 720	35	10
721 and above	25	10

@- up to 3000 Cyl per month

@@- Above 3000 Refills per month

X. 1 REALISATION OF EXCISE AND CUSTOM DUTIES FROM CRUDE OIL AND PETROLEUM PRODUCTS

(Rs. Crores)

	PRODUCTS	1980-81	1985-86	1990-91	1995-96	1996-97	1997-98
				ACTUALS			(RE)
A.	**EXCISE DUTIES**						
1.	Motor Spirit	493	749	1202	1631	2117	2677
2.	Kerosene Oil	124	203	255	258	647	443
3.	Refined Diesel Oil	280	563	693	1155	1962	2294
4.	Diesel Oil (NES)	20	23	35	80	123	146
5.	Furnace Oil	45	39	49	146	289	372
6.	Pol. Products (NOS)	196	268	421	733	881	1600
7.	Petroleum Gases	0	0	66	276	382	395
8.	Cess on crude oil	0	0	2757	2880	2675	2705
	TOTAL (A)	**1158**	**1845**	**5478**	**7159**	**9076**	**10632**
B.	**CUSTOMS DUTIES**						
1.	Crude Petroleum	16	874	3146	4052	5740	4495
2.	Petroleum Products	338	176	555	4401	5784	4457
	TOTAL (B)	**354**	**1050**	**3701**	**8453**	**11524**	**8952**
	GRAND TOTAL (A+B)	**1512**	**2895**	**9179**	**15612**	**20600**	**19584**

Figures rounded to nearest crores.
RE : Revised Estimates.

Source : Budget papers of the Central.

X.2 PERCENTAGE SHARE OF CENTRAL EXCISE ON POL TO TOTAL CENTRAL EXCISE AND/TO NET NATIONAL PRODUCT

Year	Net National Product at factor cost at current prices	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
	(..... Rs. Crores .....)					
1	2	3	4	5	6	7
1960-61	14160	416	101	3.1	0.8	24.3
1965-66	22107	898	261	4.4	1.3	29.1
1970-71	36362	1759	608	5.1	1.8	34.6
1971-72	38583	2061	708	5.6	1.9	34.4
1972-73	42382	2324	767	5.8	1.9	33.0
1973-74	52241	2802	874	5.2	1.7	33.6
1974-75	61194	3231	1011	5.4	1.7	31.3
1975-76	64531	3845	1040	6.2	1.7	27.1
1976-77	69408	4221	1163	6.3	1.7	27.6
1977-78	79671	4448	1216	5.9	1.5	27.4
1978-79	85255	5194	1359	6.4	1.6	26.2
1979-80	92314	6148	1477	6.9	1.6	24.0
1980-81	110685	6500	1216	5.9	1.1	18.7
1981-82	128797	7421	1405	5.8	1.1	18.9
1982-83	141875	8059	1604	5.7	1.1	19.9
1983-84	166550	10222	2269	6.2	1.4	22.2
1984-85	185018	11151	2449	6.0	1.3	22.0
1985-86	206133	13008	2718	6.3	1.3	20.9
1986-87	228402	14489	3014	6.3	1.3	20.8
1987-88	258891	16347	3969	6.3	1.5	24.3
1988-89	309286	18825	4435	6.1	1.4	23.6
1989-90	357285	22290	5662	6.2	1.6	25.4
1990-91	418074	24451	5478	5.8	1.3	22.4
1991-92	479612	28121	5262	5.9	1.1	18.7
1992-93	546023	30651	5042	5.6	0.9	16.4
1993-94	638979	31872	5310	5.0	0.8	16.7
1994-95	759597	36900	6696	4.9	0.9	18.1
1995-96	881216	40784	7159	4.6	0.8	17.6
1996-97	10088188	46190	9076	4.6	0.9	19.6

Source:— i) Government of India's Economic Survey for N.N.P.
ii) Budget Papers of Central Government.
iii) National Accounts Statistics.

X. 3 COMPOSITE INCIDENCE OF EXCISE AND CUSTOMS DUTIES ON PETROLEUM PRODUCTS

Year	Consumption of POL Products (Excl. R.B.F. ('000' MTS)	Central Excise Duty realistion (Rs. Crores)	Customs Duties realisation (Rs. Crores)	Total Central Excise & Customs duties (Rs. Crores)	Composite Incidence of Excise & Customs duties (Rs. Crores)
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	1163	112	1275	529.00
1977-78	25539	1216	127	1343	525.90
1978-79	28241	1369	180	1549	548.50
1979-80	29883	1477	213	1690	565.50
1980-81	30896	1604	354	1570	508.20
1981-82	32523	2269	288	1693	520.60
1982-83	34657	2449	258	1860	536.70
1983-84	35841	2718	219	2498	694.20
1984-85	38795	3014	472	2921	752.90
1985-86	40872	3969	1050	3768	921.90
1986-87	43662	4435	1075	4089	936.50
1987-88	46416	5662	2136	6105	1315.30
1988-88	50092	5478	2313	6745	1347.10
1989-90	54095	5682	2431	8093	1496.10
1990-91	55035	5478	3701	9179	1667.80
1991-92	56974	5262	4075	9337	1638.82
1992-93	58902	5042	5280	10322	1752.40
1993-94	60812	5310	6913	12223	2010.00
1994-95	65487	6996	6209	12905	1970.62
1995-96	72518	7159	8453	15612	2152.84
1996-97(P)	77224	9076	11524	20600	2667.56

(P)= Provisional

X.4 ROYALTY AND OIL DEVELOPMENT CESS PAID BY OIL COMPANIES ON PRODUCTION OF CRUDE OIL AND NATURAL GAS SINCE 1973-74 TO 1996-97.

(Rs./Lakhs)

Year	ROAYALTY PAID ON CRUDE OIL						ROYALTY PAID ON NATURAL GAS					Oil
	Western Region	Eastern Region	Southern Region	Total On Shore	Bombay High/KG Off Shore	Total	Western Region	Eastern Region	Southern Region	B.High/KG Off-Shore	Total	Development Cess
1	2	3	4	5	6	7	8	9	10	11	12	13
1973-74	520	548	-	1068	-	1068	26	5	-	-	31	-
1974-75	576	584	-	1160	-	1160	36	8	-	-	44	-
1975-76	615	645	-	1260	-	1260	43	26	-	-	69	3081
1976-77	1279	1087	-	2366	156	2522	44	59	-	-	103	5289
1977-78	1742	1907	-	3649	1016	4665	102	50	-	-	152	6375
1978-79	1171	1727	-	3498	1349	4847	88	66	-	-	154	6889
1979-80	1566	1771	-	3337	1761	5098	240	65	-	15	320	6970
1980-81	1578	531	-	2109	1997	4106	168	36	-	50	253	6040
1981-82	2075	3155	-	5230	4430	9660	184	69	-	258	511	13897
1982-83	1927	3498	-	5425	7513	12938	32	123	-	593	748	26884
1983-84	2179	3054	-	5233	10305	15538	305	108	-	911	1324	81279
1984-85	7449	9513	-	16962	11931	38893	183	114	-	2109	2406	84434
1985-86	13275	12433	-	25708	12155	37863	242	96	-	1905	2243	86629
1986-87	8590	9395	11	17996	91192	109188	359	95	-	4113	4567	98916
1987-88	9412	9833	26	19271	37724	56995	797	409	-	6594	7800	151331
1988-89	10175	10281	59	20526	39660	60185	1083	405	16	8557	10061	201364
1989-90	11561	13479	397	25437	40118	65555	1194	399	34	10409	12036	291411
1990-91	39424	26074	1291	66789	136037	202826	1283	421	68	12038	13810	278197
1991-92	17723	19385	964	38072	52885	90957	1910	428	216	18859	21413	250077
1992-93	47037	31250	2674	80961	126901	207862	2391	520	720	17229	20860	219198
1993-94	30672	24704	2086	57462	69683	127145	2912	547	882	19585	23906	217536
1994-95	32041	25660	2245	59946	96157	156103	2975	422	854	18154	22405	264559
1995-96	32716	25239	2182	60137	103576	163713	3753	457	956	21952	27118	277735
1996-97	34785	26471	2172	63428	103490	166918	3596	532	1163	21986	27277	259326

Note: 1. Figures for 1984-85 & 1985-86 have undergone due to increase in Royalty rate from Rs. 61/- Per metric tonne to 192/- Per metric tonne.

2. Figures of Royalty in 1987-88 include payments for 1986-87 and advance payments made for 1988-89. While some payments for 1987-88 has made by ONGC in 1988-89. These figures also include royalty on condensate and NGL.

3. Figures of Crude Oil Royalty for 1990-91 include arrears for the period 1.4.1987 to 31.3.90 arising on account of revision in royalty rate from Rs. 192 to Rs. 314 per M.T. w.e.f. 1.4.87 vide notification dated 18.2.91.

4. The total arrears for the period 1.4.87 to 31.3.91 @ Rs. 122 per M.T. amounting to Rs. 985.09 crores have not been paid as the Govt. is contemplating payment by book adjustments out of deposits of OCC in the Public Account of India.

5. Figures of Crude Oil royalty for 1992-93 include arrears of royalty on Crude Oil for the period 1.4.90 to 31.3.92 arisen consequent upon increase in Crude Oil royalty rate.

X.5 EXCISE DUTY ELEMENT INCLUDED IN SELLING PRICES OF BULK REFINED PETROLEUM PRODUCTS (EX-STORAGE POINT)

(RUPEES/SELLING UNIT)

(Rupees/Selling Unit)

PRODUCTS	Selling Unit	w.e.f. 17.8.79	w.e.f. 11.9.79	w.e.f. 8.6.80	w.e.f. 19.1.81	w.e.f. 11.7.81	w.e.f. 15.2.83	w.e.f. 1.4.83	w.e.f. 1.8.83	w.e.f. 1.4.84/ up to 1.3.88/	w.e.f. 1.3.88 upt to 25.7.91	w.e.f. 28.2.93	w.e.f. 1.3.94
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Av. gas 100/130	KL	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2437.59	NA
2. Av. gas 115/145	KL	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2435.85	NA
3. Av. Gas 73	KL	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2326.79	2436.84	NA
4. M. S. 87 @@	KL	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2327.50	2338.82	2568.87
5. M. S. 93	KL	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2328.92	2440.31	3068.87
6. A.T.F.	KL	402.56	402.56	333.52@	333.52	333.52	333.52	333.52	333.32	333.52	352.07	369.83	985.23
7. S.K.O.	KL	402.63	333.59	333.59@	333.59	333.59	333.59	333.59	333.59	333.59	330.44	330.44	200.14
8. H.S.D.O.	KL	399.15	330.00	330.00@	3330.00	330.00	330.00	330.00	330.00	330.00	347.49	347.74	571.73
9. L.D.O.	KL	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96	160.91	173.02	558.76
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	150.71	158.38	453.52
12. Bitumen (Bulk)	MT	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30	115.50	175.00	412.50
13. Bitumen (Packed)	MT	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	168.00	175.00	478.14
14. LPG/Domes. Packed	MT	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	273.50	285.0	530.92
15. LPG (Indust) Bulk	MT	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	273.00	285.0	1160.18
16. Naphtha*- (Fert. Use)	MT	4.50	4.36	4.36	4.36	4.36	-	-	4.40	4.40	4.00	5.50	*
17. Naphtha*- (For Non-Fert. Use)	MT	26.50	26.50	26.50	26.50	26.50	-	-	26.25	26.25	26.25	66.00	*

* Duty at applicable rates will be charged **w.e.f. 1.10.1986.

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

@ Revision effective from 11.9.1979.

Note: i) 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 fertilizer industry for purposes other than feed stock.

ii) w.e.f. 1.10.1986, the supply of FO/Naphtha to fertilizers units for purposes other than feedstock will be charged at the rate applicable to General Category.

X. 6 EX-STORAGE POINT CEILING SELLING PRICES OF MAJOR PETROLEUM PRODUCTS AND RATES OF EXCISE DUTY w.e.f. 3.7.1996

(Rs./Selling Unit)

Products	Selling unit	Ex-storage prices Without Excise duty	Rate of duty%
1	2	3	4
MS-87	KL	16055.43	20%
MS-93	KL	19180.43	20%
MS-80	KL	16091.86	20%
HS DO	KL	7432.46@	10%
LSHF (HSD) Bunkering	KL	7432.46	10%
LSHF (HSD) other	KL	11059.31	10%
SKO other than Ind.	KL	2001.40	10%
SKO-Industrial	KL	6518.63	10%
LDO	KL	7263.82	10%
ATF (Domestic)	KL	10837.56	10%
Naphtha-fert $	MT	4839.61	$
Naphtha-other $	MT	6683.26	$
For-fert $	KL	3656.16	$
Fo-other	KL	5895.86	10%
LSHS-Fert $	MT	3707.04	$
LSHS-other $	MT	6245.29	$
LPG-Packed (Domestic)	MT	6901.95	
LPG-Packed (Non-Domestic)	MT	13900.00	10%
LPG-Bulk	MT	11900.00	10%
Bitumen-Bulk	MT	5362.53	10%
Bitumen-Packed	MT	6215.76	10%
Match Wax	MT	15804.74	10%
Paraffin Wax Ist Quality	MT	20030.41	10%
Paraffin Wax-P1grade	MT	20191.57	10%

$- Prices shown against these items are exclusive of duty chargeable extra (applicable as per end use)

@ HSD prices have been reduced to 6574.87 w.e.f. 6.7.1996.

X.7 SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.1996

S. No.	PRODUCTS	Andhra** Pradesh	Arunachal Pradesh	Assam	Bihar	Goa	Gujarat	Haryana
	1	2	3	4	5	6	7	
A. CRUDE OIL & GAS								
1.	Crude Oil	4.00%	No Tax	4%	4%	4%	4%	4%
2.	Natural Gas	16%	No Tax	12%	--	8%	19%	9%
B. PETROLEUM PRODUCTS								
3.	Aviation Spirit	30.55%	No Tax	25%	25%	20%	30% Bonded & duty paid 23%	7%
4.	Aviation Turbine Fuel	30.55%	No Tax	25%	25%	20%	30% Bonded & duty paid 9%	6%
5.	Motor Spirit	30.55%	do	17%	9%	17%	20%	7%
6.	H.S.D.	19.33%	do	16%	14%	17%	18%	7%
7.	L.D.O.	19.33%	do	16%	14%	17%	8%	9%
8.	M.L.O.	19.33%	do	10%	9%	8%	12%	9%
9.	S.K.O.	8%	do	2%	6%	Exempt	Exempt	9%
10.	I.K.O.	-	do	-	5%		@	
11.	F.O.	12%	do	10%	8%	17%	12%	9%
12.	M.T.O.	8%	do	10%	9%	8%	12%	9%
13.	Lubes	16%	do	12%	9%	8%	14%	9%
14.	Greases	16%	do	12%	9%	8%	14%	9%
15.	Petroleum Naphtha	16%	do	10%	9%	17%	18%	9%
16.	Bitumen/Asphalt	16%	do	10%	9%	8%	12%	9%
17.	Petroleum Coke	4.00%	do	4%	4%	2%	4%	4%
18.	Indane (LPG)	16%	do	12%	9%	Exempt	17%	9%
19.	Transformer Oil	10%	do	10%	9%	8%	12%	9%
20.	H.B. Fluid	16%	do	10%	9%	8%	14%	9%
21.	L.S.H.S.	16%	do	10%	9%	17%	15%	9%

** These rates are inclusive of other levies recoverable from the customers as shown at the end of table.
@ : Kerosene for others use @ 8%.

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X. 7 Contd. SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.1996

S. No.	PRODUCTS	Himachal Pradesh	J&K	Karnataka	Kerala	Madhya Pradesh	Maharashtra	Manipur
	8	9	10	11	12	13	14	
A. CRUDE OIL & GAS								
1.	Crude Oil	4%	4%	4%	4%	4%	4%	4%
2.	Natural Gas	8%	8%	10%	10%		12%	-
B. PETROLEUM PRODUCTS								
3.	Aviation Spirit	6%	8%	22%	15%	15%	Bonded 10% Duty paid 10%	10%
4.	Aviation Turbine Fuel	6%	8%	22%	15%	15%	Bonded 30% Duty paid 24%	10%
5.	Motor Spirit	6%	4%	22%	20%	20%	21%	15%
6.	H.S.D.	6%	8%	20%	17%	20%	21%	7%
7.	L.D.O.	8%	8%	20%	25%	15%	12%	7%
8.	M.L.O.	8%	8%	12%	12.5%	6%	12%	-
9.	S.K.O.	8%	Exempted	4% (PDS)	5%	2%	Exempted	3%
10.	I.K.O.	-	do	6%	-	2%	8%	3%
11.	F.O.	8%	8%	12%	12.5%	6%	12%	7%
12.	M.T.O.	8%	8%	12%	12.5%	6%	12%	NA
13.	Lubes	8%	8%	12%	15%	15%	10%	10%
14.	Greases	8%	8%	12%	15%	15%	10%	4%
15.	Petroleum Naphtha	8%	8%	12%	7%	6%	12%	7%
16.	Bitumen/Asphalt	8%	8%	4%	12.5%	6%	12%	7%
17.	Petroleum Coke	4%	4%	4%	4%	4%	4%	4%
18.	Indane (LPG)	8%	8%	12%	20%	15%	6<12%	7%
19.	Transformer Oil	8%	8%	12%	8%	12%	8%	-
20.	H.B. Fluid	8%	8%	12%	15%	15%	13%	-
21.	L.S.H.S.	8%	8%	12%	12.5%	6%	8%	-

<3 Only for L.P.G. in Cylinders below 15 kgs.
For L.P.G. in Cviinders above 15 kg Rate of Sales tax is 8%.

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X. 7 Contd. SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.1996

S. No.	PRODUCTS	Meghalaya	Mizoram	Nagaland	Orissa	Punjab	Rajasthan	Tamil Nadu
		15	16	17	18	19	20	21
A.	CRUDE OIL & GAS							
1.	Crude Oil	-	-	3%	4%	4%	4%	4%
2.	Natural Gas	-	-	-	-	8%	10%	12%
B.	PETROLEUM PRODUCTS							
3.	Aviation Spirit	-	-	12%	20%	8%	20%	20%
4.	Aviation Turbine Fuel	-	-	12%	20%	8%	20%	20%
5.	Motor Spirit	5%	8%	5%	18%	7%	20%	20%
6.	H.S.D.	4%	5%	3.25%	18%	4%	16%	16%
7.	L.D.O.	2%		3.25%	16%	8%	16%	16%
8.	M.L.O.	-	-	-	12%	8%	10%	12%
9.	S.K.O.	1%	-	1.15%	4%	8%	10%	3%
10.	I.K.O.	-	-	-	4%	8%	10%	3%
11.	F.O.	-	-	-	12%	8%	10%	12%
12.	M.T.O.	-	-	-	12%	8%	10%	12%
13.	Lubes	5% +2%SC	8%	5%	16%	8%	10%	12%
14.	Greases	5% +2%SC	-	5%	16%	8%	10%	12%
15.	Petroleum Naphtha	-	-	-	12%	8%	2%	12%
16.	Bitumen/Asphalt	-	-	-	12%	8%	10%	8%
17.	Petroleum Coke	-	-	-	4%	4%	4%	3%
18.	Indane (LPG)	10%+ 2% S/C	10%	8%	12%	8%	10%	8%
19.	Transformer Oil	-	-	-	12%	8%	10%	8%
20.	H.B. Fluid	-	-	-	-	8%	10%	8%
21.	L.S.H.S.	-	-	-	-	8%	10%	12%

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X.7 Contd. SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.1996

S. No.	Products	Tripura	Uttar** Pradesh	West Bengal	Chandigarh	Delhi
		22	23	24	25	26
A.	**CRUDE OIL & GAS**					
1.	Crude Oil	4%	4%	4%	4%	4%
2.	Natural Gas	-	10%	-	8%	7%
B.	**PETROLEUM PRODUCTS**					
3.	Aviation Spirit	12%	14%	12.85%	15 PPL	8%
4.	Aviation Turbine Fuel	25%	14%	25%	15 PPL	8%
5.	Motor Spirit	8%	14%	10.36%	15 PPL	8%
6.	H.S.D.	5%	16%	10.91%	10 PPL	8%
7.	L.D.O.	-	16%	10.91%	8%	8%
8.	M.L.O.	-	10%	12%	7%	7%
9.	S.K.O.	5%	10%	4.5% PPL	8%	3%
10.	I.K.O.	-	-	7.5	-	-
11.	F.O.	-	7.5%	12%	8%	7%
12.	M.T.O.	-	15%	12%	8%	10%
13.	Lubes	12%	10%	15%	8%	8%
14.	Greases	12%	10%	15%	8%	8%
15.	Petroleum Naphtha		15%	12%	8%	7%
16.	Bitumen/Asphalt		10%	12%	8%	7%
17.	Petroleum Coke	12%	4%	4%	4%	4%%
18.	Indane (LPG)	12%	10%	17%	8%	5%
19.	Transformer Oil	-	10%	12%	8%	7%
20.	H.B. Fluid	-	10%	15%	8%	7%
21.	L.S.H.S.	-	7.5%	12%	8%	7%

Note : 1. PPL means Paise per litre.
2. Wherever (-) is shown against any of the product rates, same indicates Sales Tax rate not available.

ADDITIONAL OTHER TAXES PAYABLE/RECOVERABLE AS ON 1.4.96

STATES	RATES
1. Bihar	1. 1% Addl. Tax on gross turnover is payable. (Not applicable on MS, HSD, LDO, SKO, Furnace Oil, Av. Gas, ATF and Declared goods). This is recoverable from customers. 2. 10% Surcharge on Sales Tax is payable, but not recoverable from the customers.
2. Chandigarh	Surcharge @ 10% on Sales Tax is payable on all the products except on MS, Av. Gas, ATF and HSD. This is recoverable from the customers.
3. Goa	Addl. Sales Tax @ the following rates on Sales Tax not on declared goods is payable but the same is not recoverable from the customers. a) On gross Turnover above Rs. 20 lacs, but less than Rs. 40 lacs 10% b) On gross Turnover above Rs. 40 lacs 15%
4. Gujarat	1. Additional Tax : @ 20% on tax on (MST products) i.e. MS, HSD, Av. Spirit, ATF. This is recoverable from the customers. 2. Turnover Tax : at the following rate is payable on all the products (not on ATF, Av. spirit, Av. Gas, MS & HSD), but not recoverable from the customers.

a) Upto taxable turnover of Rs. 50 lacs	Nil
b) On taxable turnover exceeding Rs. 50 lacs but less than Rs. 2 crores	@ 1% of taxable turnover in excess of Rs. 50 lacs.
c) On taxable turnover between Rs. 2 crores and Rs. 4 crores.	Rs. 1.5 lacs plus @ 1.25% of taxable turnover in excess of Rs. 2 crores.
d) On taxable turnover between Rs. 4 crores and Rs. 8 crores	Rs. 4 lacs plus @ 1.5% of taxable turnover in excess of Rs. 4 crores.
e) On taxable turnover above Rs. 8 crores.	Rs. 10 lacs plus @ 2% of taxable turnover in excess of Rs. 8 crores.

5. Haryana	Surcharge @ 10% on Sales Tax on all products. This is recoverable from the customers.
6. J&K	Surcharge @ 5% of Sales Tax is payable. This does not apply to products falling under Motor Spirit Tax Act (i.e. MS, HSD). This is recoverable from the customers.
7. Karnataka	1. Surcharge : @ 15% on S. Tax on all products except Kerosene, MS (excluding Av. Fuel, HSD, LDO, HFHSD, LSHSD) is payable. This is recoverable from the customers. 2. Cess: a) @ 5% on Sales Tax on all products except Petrol & Diesel. b) @ 25 paise per litre on Petrol. c) @ 10 paise per litre on Diesel. This CESS is payable only by those dealers who are having place of business within Bangalore City Planning area, irrespective of place (in Karnataka) from where sales are effected). This is recoverable from the customers.

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ADDITIONAL OTHER TAXES PAYABLE/RECOVERABLE AS ON 1.4.96

STATES		RATES	
	3.	Turnover tax on Total Turnover (TOT) at the following rate is payable, but not recoverable from the customers.	
	a)	On TOT between Rs. 10 & 200 lacs	1.25%
	b)	Between Rs. 200 & above lacs	1.75%
	c)	above Rs. 500 lacs	2.75%
		Second & subsequent sale of MS, SKO, HSD, LPG, Lubes & Greases exempted.	
8. Kerala	1.	Surcharge @ 10% of Sales Tax is Payable. This is not recoverable from the customers.	
	2.	4% Turnover Tax is payable. This is not recoverable from the customers.	
10. Orissa		Surcharge @ 10% on Sales Tax is payable, but the same is not recoverable from the customers.	
11. Punjab		Additional tax/surcharge @ 10% of the Sales Tax on all products except MS, Avn. Spirit & HSD is payable. This is recoverable from the customers.	
12. Tamil Nadu	1.	Surcharge: @ 15% Sales Tax is payable on all products. This is recoverable from the customers.	
	2.	Addl. Surcharge : @ 5% on Sales Tax on the sale of products in Municipal Corporation of madras city area and within 32 KMs from outer peripheral limits of Municipal Corporation of Madras. This is recoverable from the customers.	
	3.	Additional Tax : at the following rate is payable on the taxable turnover. This is not recoverable from the customers.	
		On taxable Turnover	
	a)	below Rs. 10 lacs	Nil
	b)	between Rs. 40 lacs & 1.0 crs.	1.25%
	c)	between Rs. 1.0 crs. & 5 crs.	1.5%
	d)	between Rs. 5 crs & 10 crs.	2%
	e)	between Rs. 10 crs & 300 crs.	2.25%
	f)	above Rs. 300 crs.	3%
13. Tripura		Additional tax @ 0.50% on taxable turnover is payable. This is not recoverable from the customers.	
14. Uttar Pradesh		Additional tax @ 25% on Sales tax is payable. This is included in the billable rates shown in Rate Chart. (Not applicable on MS, Av. Gas, ATF, LDO, HSD & Crude Oil). This is recoverable from the customers.	
15. W. Bengal	1.	Surcharge @ 10% on S. tax is payable on all the products except on coke. This is recoverable from the customers.	

X. 8 SALES TAX PAYMENTS (INCLUSIVE OF MST AND CST) ON CRUDE OIL, NATURAL GAS & PETROLEUM PRODUCTS MADE BY THE OIL COMPANIES TO STATE/UNION TERRITORY GOVERNMENTS DURING THE YEARS 1987-88 TO 1996-97

(Rs. in lakhs)

STATES/UTs.	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9	10	11
1. Crude Oil										
Assam	3407	3537	4290	4611	4428	5017	6205	6122	5976	6218
Gujarat	3334	3627	4731	6195	5038	6542	7349	7675	7826	8333
Arunachal Pradesh	21	22	30	32	43	50	69	41	23	32
Nagaland	45	71	83	87	48	65	72	14	-	-
Maharashtra*	10924	6835	7428	1550	13950	16368	15207	21312	23441	22814
Tamil Nadu	9	20	152	257	257	365	464	492	470	453
Total (1)	**17741**	**14112**	**16714**	**26682**	**23764**	**28407**	**29366**	**35656**	**37736**	**37850**
2. Natural Gas										
Assam	366	326	422	429	417	520	497	580	722	1065
Gujarat	4052	7280	11199	9952	13136	17205	8701	5931	7924	8212
Maharasthra (Bombay High)	4537	4319	6204	5628	5361	6505	6602	8775	4998	
Rajasthan	-	-	-	-	-	-	-	-	8	
Arunachal Pradesh	Neg.	17	48	82	-	-	-			
Tamil Nadu	Neg.	3	6	17	18	38	40	28	39	
Tripura	15	18	17	53	59	93	82	78	113	
Andhra Pradesh	-	-	-	-	317	1097	1368	1374	1627	1956
Total (2)	**8970**	**11963**	**17095**	**16161**	**19308**	**25458**	**17290**	**16767**	**15431**	**11450**
3. POL Products										
(a) States										
Andhra Pradesh	13597	14883	22318	25062	37812	41956	51981	61688	73029	889703
Assam	3350	3519	4509	3654	5228	5292	5581	7030	8150	13011
Bihar	7328	8334	10326	11239	16122	18258	19966	22818	25181	29497
Gujarat	21030	26328	34430	39456	54531	62218	71876	88738	97801	13689
Haryana	2251	2557	3764	4584	6123	6874	8339	9488	10402	18469
Himachal Pradesh	179	186	181	261	303	418	489	496	614	806
Jammu & Kashmir	542	570	686	759	1065	1261	1564	1742	2305	2568
Karnataka	11439	12256	16748	21801	30930	35426	44452	49346	60135	77274
Kerala	11642	14304	8617	27512	30518	39708	41540	45693	56791	70780
Madhya Pradesh	5488	7040	10160	13168	18784	20824	24364	31365	36178	45378
Maharasthra	20556	24245	37124	52975	72518	83122	92755	116384	128425	159439
Manipur	163	179	183	164	277	338	452	463	464	592
Meghalaya	1	1	1	1	1	1	1	6	110	277
Mizoram	15	18	20	19	39	95	108	113	134	177
Nagaland	13	37	68	69	59	60	99	147	155	222
Orissa	1559	1931	2915	3958	5540	6553	8272	10003	11802	14974
Punjab	3474	3615	5152	6326	8059	9221	10487	10834	13845	17263
Rajasthan	5624	7592	11681	13508	17136	22033	24963	30236	36759	44588
Tamil Nadu	19083	21673	31130	39450	51775	61016	73144	80939	93275	117596
Tripura	203	256	287	264	293	336	321	354	391	476
Uttar Pradesh	16334	17680	22682	28995	26339	40387	46152	55540	66992	85141
West Bengal	10447	11524	16624	18991	23671	29452	34294	39183	39132	47867
Goa	1568	1373	2005	2367	3502	4994	6746	8023	8187	10137
Sikkim	-	-	-	-	-	-	37	57	53	80
(b) Union Territories										
Daman	-	-	-	-	-	-	-	13	18	29
Chandigarh	41	67	61	61	62	79	106	130	147	186
Delhi	4420	4497	6160	7829	8914	10194	12667	15248	23407	28964
Pondicherry/Man	17	20	-	2	39	6	16	105	180	221
Total (3)	**160364**	**184685**	**247032**	**322478**	**429440**	**500192**	**580772**	**686182**	**794062**	**1011574**
Grand Total	**187075**	**210760**	**282441**	**365321**	**472712**	**554057**	**627428**	**738605**	**847605**	**1060874**

*= Central Govt. Source: Compiled from Receipt of Individual companies.

XI.1 TONNAGE OF INDIAN TANKERS FLEET

(DWT In '000 Mts.]

Year	Coastal oil Tanker				Total		Offshore		Specialised		Total Offshore		Overseas								Overseas		Total All	
	Product Carriers		Crude Oil Carriers		Coastal Oil Tanker		Supply Vesels		Vessels For Offshore		Supply Vessels & Specialised Vessels for Offshore		Ore Oil Bulk		Crude Oil Carriers		Product Carriers		LPG Carriers		Total		Tanker	
	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT	No. of Tanker	DWT
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1975	-	-	-	-	9	137.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	2420.0	40	2557.6
1976	-	-	-	-	9	137.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	3078.0	45	3215.6
1977	-	-	-	-	9	137.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	3108.9	46	3245.1
1978	-	-	-	-	9	126.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	3444.5	48	3571.3
1979	-	-	-	-	9	132.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	3424.0	48	3556.9
1980	-	-	-	-	10	158.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	3335.3	48	3493.8
1981	-	-	-	-	16	247.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	3364.0	55	3611.7
1982	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	3518.8	60	3819.4
1983	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	3482.1	59	3782.7
1984	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	3976.6	67	4277.2
1985	-	-	-	-	18	300.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	3807.0	66	4113.1
1986	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	3592.9	66	3899.0
1987	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	3592.9	66	3899.0
1988	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	3557.6	69	3863.7
1989**	13	185.6	2	82.3	15	267.9	57	73.1	25	49.7	82	122.8	9	988.9	22	2121.2	25	575.5	-	-	56	3685.6	153	4076.3
1990	13	185.6	2	88.2	15	267.8	57	69.7	30	70.5	87	140.2	9	990.5	22	2121.2	25	601.5	-	-	56	3713.2	158	4121.2
1991	14	186.1	2	82.2	16	268.3	63	75.9	31	70.7	94	146.6	9	990.5	23	2206.4	25	601.9	1	17.0	58	3815.4	168	4230.3
1992	15	217.0	2	82.2	17	299.2	63	75.9	32	70.8	95	146.7	8	889.0	23	2206.4	25	601.4	2	34.7	58	3731.5	170	4177.4
1993	11	144.9	2	82.2	13	227.1	67	84.9	33	61.9	100	146.8	3	312.0	25	2441.0	34	1065.6	2	34.7	64	3853.3	177	4227.2
1994	11	144.9	2	82.2	13	227.1	73	99.9	27	61.2	100	153.1	3	312.0	29	3052.0	31	839.9	2	34.7	65	4238.6	178	4618.8
1995	12	145.5	2	82.2	14	227.7	74	99.9	27	62.8	101	154.7	3	312.0	32	3475.0	31	833.2	2	34.7	68	4654.9	183	5037.3
1996	12	148.0	2	82.2	14	230.2	71	87.0	26	61.9	97	148.9	3	312.0	33	3615.0	34	1001.0	3	52.9	73	4980.9	184	5360.0
1997	11	131.6	2	82.2	13	213.8	71	87.0	27	63.2	98	150.2	3	312.0	31	3212.5	36	1231.9	4	71.0	74	4827.4	185	5191.4

* : As on 31st December of each year.
** : As on 31st March of each year from 1989 onwards.
Source : Directorate General Shipping, Bombay
DWT = Dead Weight Tonnage

XI. 2 INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4
	COASTAL TRADE		
	TANKERS (Product Carriers)		
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.t. Sarojini Naidu	1974	10759	16440
2. m.t. Rafi Ahmed Kidwai	1975	15035	24439
3. m.t. Jai Narayan Vyas	1975	15035	24529
		40829	65408
B. M/s. Essar Shipping Ltd. Bombay			
4. m.t. Nand Prakriti	1975	18307	30465
C. M/s. Reliance Industries			
5. m.t. Relcham Arjun	1971	14960	23928
D. M/s. Seatrans Shipping Co. Ltd., Bombay			
6. m.t. Raj Sevak	1966	750	1200
E. The Shipping Credit & Investment Co. of Indian Ltd., Bombay			
7. m.t. Nand Smiti	1982	4275	6600
F. M/s Jaisu Shiping (P) Ltd.			
8. m.t. Al-Nims	1976	298	508
G. M/s. Mercater Lines			
9. m.t. Mindoro	1968	289	555
H. M/s. Samson Maritime Ltd.			
10. m.t. Ocean Devotee	1978	1090	2052
I. M/s Hede Ferrominas (P) Ltd.			
11. m.t. Hoogli Harvest	1974	493	872
Total 11 Vessels		**81291**	**131588**
	TANKERS (Crude Oil Carriers)		
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.t. C.V. Raman	1981	25040	41123
2. m.t. Homi Bhabha	1982	25040	41126
Total 2 vessels		**50080**	**82249**
	OFFSHORE SUPPLY VESSELS		
A. M/s Garware Shipping Corpn. Ltd., Bombay			
1 m.v. Garware-I	1983	881	1050
2. m.v. Garware-II	1983	881	1050
3. m.v. Garware-III	1984	881	1050
4. m.v. Garware-IV	1984	881	1050
5. m.v. Garware-V	1984	881	1050
		4405	**5250**
B. The Great Eastern Shipping Co. Ltd., Bombay			
6. m.v. Malaviya One	1983	869	1073
7. m.v. Malaviya Two	1983	870	1084
8. m.v. Malaviya Three	1984	1084	1251
9. m.v. malaviya Four	1984	1085	1242

Contd....

XI. 2 Contd. INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4
10. m.v. Malaviya Five	1980	650	993
11. m.v. Malaviya Six	1981	650	993
12. m.v. Malaviya Nine	1983	1351	1517
13. m.v. Gal DLB 900	1995	11443	
		18002	**8153**
C. M/s Essar Shipping Ltd. Bombay			
14. m.v. Nand Godavari	1984	1313	1751
15. m.v. Nand Panna	1984	1313	1751
16. m.v. Nand Krishna	1984	1313	1751
17. m.v. Nand Heera	1984	1313	1751
		5252	**7004**
D. M/s. India Securities Ltd., Madras			
18. m.v. Nand Cauvery	1984	1299	1868
E. M/s VNS Offshore Services Co., Bombay			
19. m.v. Kansi Namrata	1969	487	737
F. M/s Hede Ferromina Pvt. Ltd., Goa			
20. m.v. Ferromina Harvest	1971	629	759
G. M/s Varun Shipping Co. Ltd., Bombay			
21. m.v. Neel Kamal	1983	999	1084
22. m.v. Neel Akash	1984	999	1086
		1998	**2170**
H. The Shipping Corpn. of India Ltd., Bombay			
23. m.v. Feroze Gandhi	1984	1310	1758
24. m.v. C.P. Srivastava	1984	1310	1758
25. m.v. SCI-01	1984	1310	1775
26. m.v. SCI-02	1984	1310	1776
27. m.v. SCI-03	1984	1310	1771
28. m.v. SCI-04	1984	1310	1812
29. m.v. SCI-05	1984	1310	1819
30. m.v. SCI-06	1984	1310	1817
31. m.v. Capt. F.M. Juvale	1985	1310	1809
32. m.v. Dr. Nagendra Singh	1985	1310	1817
		13100	**17912**
I. Oil & Natural Gas Commission, Bombay			
33. m.v. Sindu-01	1984	1310	1450
34. m.v. Sindhu-02	1985	1310	1450
35. m.v. Sindhu-03	1985	1310	1450
36. m.v. Sindhu-04	1986	1310	1450
37. m.v. Sindhu-05	1985	1302	1450
38. m.v. Sindhu-06	1985	1302	1450
39. m.v. Sindhu-07	1985	1302	1450
40. m.v. Sindhu-08	1085	1302	1450
41. m.v. Sindhu-09	1985	1302	1450
42. m.v. Sindhu-10	1985	1302	1450
43. m.v. Sindhu-11	1985	1302	1450
44. m.v. Sindhu-12	1985	1302	1450
45. m.v. Sindhu-14	1987	1310	1450
46. m.v. Sindhu-15	1992	1323	1450
47. m.v. Sindhu-16	1993	1323	1450
48. m.v. Sindhu-17	1993	1323	1450

Contd....

XI. 2 Contd. INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4
49. m.v. Samudrika-01	1986	949	950
50. m.v. Samudrika-02	1986	949	950
51. m.v. Samudrika-03	1986	949	950
52. m.v. Samudrika-04	1985	949	950
53. m.v. Samudrika-05	1986	949	950
54. m.v. Samudrika-06	1986	949	950
55. m.v. Samudrika-07	1987	949	950
56. m.v. Samudrika-08	1986	949	950
57. m.v. Samudrika-09	1986	949	950
58. m.v. Samudrika-10	1986	949	950
59. m.v. Samudrika-11	1986	949	950
60. m.v. Samudrika-12	1986	949	950
61. m.v. Samudrika-14	1986	949	950
62. m.v. Samudrika-15	1985	949	950
63. m.v. Samudrika-16	1985	949	950
64. m.v. Samudrika-17	1985	949	950
65. m.v. Samudrika-18	1985	949	950
		37068	**39350**
J. M/s Sadhana Technical Works Pvt. Ltd.			
66. m.v. Sagarika II	1976	671	933
K. M/s Mazgaon Dock ltd.			
67. m.v. Suvidha	1983	1310	1585
L. Admn. of Union Territory of Lakshadweep			
68. m.v. Thinnakara	1993	738	960
M. GAL Offshore Shippin Co.			
69. Gal Amber Sea	1975	640	-
N. M/s Seaspan Shipping			
70. m.v. Seaspan I	1984	157	-
O. M/s Dolphin Offshore			
71. OSV Ganga Dolphin	1982	369	272
Total 71 Vessels		**86125**	**86953**
SPECIALISED VESSELS FOR OFFSHORE SERVICES			
A. M/s Infrastructural Leasing and Financial Services Ltd. Bombay			
1. m.v. Nand Rachit (DSV)	1980	1548	1200
B. M/s Essar Shipping Ltd., Bombay			
2. m.v. Essar Discoverer	1977	5971	5300
3. m.v. Essar Stena-I	1981	4485	2970
		10456	**8270**
C. M/s Peerless Drive Ltd.			
4. m.v. Nand Shamik (MSV)	1982	3964	1430
5. m.v. Nand Rewant (MSV)	1984	3966	2067
6. DSV Drive Ocean	1983	2248	2001
		10178	**5498**

Contd....

XI. 2 Contd. INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4
D. M/s Oil % Natural Gas Commission, Bombay.			
7. m.v. Samudra Nidhi (MSV)	1985	2995	2189
8. m.v. Samudra Sarvekshak (NDT)	1986	4018	2124
9. m.v. Samudra Prabha (NDT)	1986	4018	2124
10. m.v. Samudra Sanchini (Research)	1986	1500	2145
11. m.v. Anweshak	1974	715	1469
12. m.v. Sagar Vijay (Drillship)	1985	11103	9239
13. m.v. Samudra Suraksha	1982	5006	4348
14. m.v. Sagar Bhushan	1987	11103	9239
15. m.v. Sagarika-IV	1983	4207	1096
16. m.v. Sagar Samrat	1973	4186	6398
17. m.v. Sagar Sandhani	1985	2156	1300
		51007	**41671**
E. M/s Samson Maritime			
18. m.v. Ocean Pearl (SPSM)	1966	482	670
F. M/s Bombay Offshore Supplies & Services Bombay.			
19. m.v. Boss-1 (AHT)	1982	491	407
G. M/s South India Corpn. (Agencies) Ltd., Madras			
20. m.v. Sagar Sevak	1972	490	860
H. M/s Jaisu Shipping Co. (P) Ltd.			
21. m.v. Noorani Sea Horse	1970	99	99
22. m.v. Sagar Deep	1983	2755	1568
23. m.v. Paradeep	1984	602	162
		3456	**1829**
I. The Geological Survey of India			
24. m.v. Samudra Manthan (S. Research)	1985	2374	1825
25. m.v. Samudra Kaustubh	1985	284	94
26. m.v. Samudra Saudhikama	1985	284	94
		2942	**2013**
J. The Council of Scientific & Industrial Research			
27. m.v. Sagar Sampada	1984	2661	800
Total 27 Vessels		**83711**	**63218**
	OVERSEAS ORE OIL BULK CARRIERS		
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.v. Maharishi Dayanand	1978	66644	123450
2. m.v. Maharishi Karve	1978	66644	123450
		133288	**246900**
B. M/s Essar Shipping Ltd., Bombay			
3. m.v. Nand Shivchand	1982	37813	65075
	Total 3 Vessels	**171101**	**311975**

Contd....

XI. 2 Contd. INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4
OIL TANKERS (CRUDE CARRIERS)			
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.t. Subedar Joginder Singh PVS	1984	37885	67137
2. m.t. Major Dhan Singh Thapa PVC	1984	37885	67153
3. m.t. naik Jadunath Singh PVC	1984	37885	67169
4. m.t. Company Havildar major Piru S. PVC	1984	37855	67161
5. m.t. Capt. Gurbachan Singh PVC	1984	37855	67167
6. m.t. Lance naik Karam Singh PVC	1984	37855	67170
7. m.t. Major Saitan Singh PVC	1985	37855	67185
8. m.t. major Somnath Sharma PVC	1984	37855	67225
9. m.t. Havildar Abdul Hamid PVC	1985	37855	67164
10. m.t. Col. Ardshir Burzorji Tarapore PVC	1985	37855	67124
11. m.t. Lt. Rama Raghoba Rane, PVC	1984	37855	67227
12. m.t. Vivekananda	1974	51717	89371
13. m.t. Satyamurthi	1975	51533	89351
14. m.t. Netaji Subhash Bose	1973	51526	89392
15. m.t. Lok Manya Tilak	1975	51535	89411
16. m.t. B.R. Ambedkar	1974	51718	89454
17. m.t. Chattrapati Shivaji	1974	51718	89490
18. m.t. Rajendra Prasad	1975	63460	115723
19. m.t. Kanchanjunga	1975	139820	276755
20. m.t. Motilal Nehru	1990	51778	85429
21. m.t. Jawahar lal Nehru	1990	51778	85429
22. m.t. Ankleswar	1994	80130	139115
23. m.t. Gandhar	1994	80130	139115
24. m.t. Maharaja Agrasen	1995	80130	139020
25. m.t. Gurugobind Singh, PVC	1995	80130	139020
		1353568	**2394957**
B. M/s Ratnakar Shipping Co. Ltd., Calcutta			
26. m.t. Ratna Abha	1982	40614	60300
C. M/s Great Eastern Shipping Co.			
27. m.t. Jag Ladki	1992	78710	145242
D. M/s Essar Shipping Ltd., Bombay			
28. m.t. Shravan	1991	79718	153000
29. m.t. Kamlesh	1991	79718	153000
30. m.t. Nand Ishwari	1991	79718	153000
31. m.t. Kishore	1992	74718	153000
Total 31 Vessels		**313872**	**612000**
		1786764	**3212499**
OIL TANKERS (PRODUCT CARRIERS)			
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.t. Dadabhai Nauroji	1977	15045	24469
2. m.t. Aurobindo	1976	15045	24411
3. m.t. Kalandia	1976	15045	24490
4. m.t. major Hoshiar Singh PVC	1985	28704	45421
5. m.t. Lance Naik Albert Ekka	1985	28704	45473
6. m.t. flying Officer Nirmal Jit Singh Shekhawat PVC	1985	28704	45485
7. m.t. Lt. Arun Khetarpal	1985	28704	45453
8. m.t. Rabindranath Tagore	1993	26481	45135
9. m.t. Bankimchandra Chatterjee	1994	26474	45135
10. m.t. Jhulelal	1981	13279	19954
11. m.t. Vasaveswara	1982	17199	29990
12. m.t. Bharat Darshan	1991	16515	29775
		259899	**425191**

Contd....

XI. 2 Contd. INDIAN TONNAGE AS ON 31.3.1997

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1	2	3	4.
B. M/s The Great Eastern Shipping Co. Ltd.			
13. m.t. Jag Prakash	1974	15489	25080
14. m.t. Jag Palak	1985	18542	26970
15. m.t. Jag Preeti	1981	21206	28679
16. m.t. Jag Pari	1982	20991	28679
17. m.t. Jag Paya	1975	20415	32360
18. m.t. Jag Prabhat	1985	18542	26967
19. m.t. Jag Prahati	1985	18542	26970
20. m.t. Jag Pranam	1984	28010	50600
21. m.t. Jag Padma	1982	27771	47048
22. m.t. Jag Praja	1982	17199	29990
23. m.t. Jag Prayog	1982	17199	29990
24. m.t. Jag Pratap	1995	27627	45693
25. m.t. Jag Pradip	1996	27627	45684
26. m.t. Jag Pravitra	1985	28010	50600
		307170	**495310**
C. M/s Varun Shipping Co. Ltd.			
27. m.t. Vishwadoot	1982	18959	29999
28. m.t. Shaktidoot	1982	17751	29999
29. m.t. Jaidoot	1984	22989	34247
		59699	**94245**
D. M/s Essar Shipping Ltd., Bombay			
30. m.t. Nand Kishore	1981	13906	19602
31. m.t. Nand Hari	1981	11135	19604
32. m.t Nand Vasu	1983	25692	39701
		50733	**78907**
E. M/s Contury Shipping, Bombay			
33. m.t. Aditya Vikram	1981	3850	7070
34. m.t. Aditya Vijay	1981	16899	29990
F. M/s Sanmar Shipping Corporation		**20749**	**37060**
35. m.t. Sanmar Sential	1986	28017	50600
36. m.t. Sanmar Symphony	1985	28017	50600
		56034	**101200**
Total 36 Vessels		**754284**	**1231913**
LPG Carriers			
A. M/s Shipping Corpn. of India Ltd., Bombay			
1. m.t. Nanga Parbat	1990	17778	176601
2. m.t. Anna Puma	1991	17778	17601
B. M/s Varun Shipping		**35556**	**35202**
3. m/t Maharishi Vyas	1975	15092	18165
4. m/t. Maharishi Vashisth	1976	15559	17650
		30651	**35815**
Total 4 Vessels		**66207**	**71017**

Source: Directorate General of Shipping, Bombay.

Contd....

XI.3 SHARE OF TRAFFIC OF PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS

(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	1969-70	6.89	1.53	22.5
	1979-80	8.56	4.58	53.5
	1985-86	12.13	6.06	50.0
	1986-87	12.07	5.91	49.0
	1987-88	13.07	6.19	47.7
	1988-89	14.22	6.47	45.5
	1989-90	14.45	6.44	44.6
	1990-91	15.24	7.26	47.6
	1991-92	16.00	7.69	48.1
	1992-93	18.34	8.94	48.7
	1993-94	18.50	8.70	47.0
	1994-95	20.54	9.73	47.4
	1995-96	21.52	10.74	49.9
	1996-97*	23.12	10.98	47.5
Bombay	1969-70	15.04	8.60	57.2
	1979-80	16.57	7.84	47.3
	1985-86	24.26	15.47	63.8
	1986-87	25.06	15.52	61.0
	1987-88	28.65	19.01	66.3
	1988-89	28.70	18.41	64.2
	1989-90	28.55	18.58	65.1
	1990-91	29.79	19.89	66.8
	1991-92	27.21	19.76	72.6
	1992-93	29.02	20.05	69.1
	1993-94	30.74	20.50	66.7
	1994-95	32.05	20.09	62.7
	1995-96	34.05	30.15	59.2
	1996-97*	33.73	18.71	55.5
Madras	1969-70	6.44	2.24	34.8
	1979-80	9.99	3.73	37.3
	1985-86	18.15	8.93	49.2
	1986-87	19.78	10.31	52.1
	1987-88	22.02	12.23	53.6
	1988-89	23.86	10.76	45.1
	1989-90	23.94	9.72	40.6
	1990-91	24.52	9.83	40.1
	1991-92	25.05	10.08	40.2
	1992-93	25.33	9.73	38.4
	1993-94	26.54	11.04	41.6
	1994-95	29.46	11.97	40.6
	1995-96	30.72	11.57	37.7
	1996-97*	31.85	12.45	39.1
Cochin	1969-70	4.79	3.56	74.3
	1979-80	5.47	3.87	70.8
	1985-86	5.11	3.83	75.0
	1986-87	6.88	5.45	79.2
	1987-88	6.80	5.37	79.0

Contd....

XI.3 Contd. SHARE OF TRAFFIC OF PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS

(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
	1988-89	7.82	6.27	80.2
	1989-90	7.13	5.59	78.4
	1990-91	7.28	5.80	79.7
	1991-92	7.48	5.88	78.6
	1992-93	7.98	6.22	77.9
	1993-94	7.62	6.12	80.3
	1994-95	8.63	6.60	76.5
	1995-96	11.50	9.36	81.4
	1996-97*	11.74	9.23	78.6
Kandla	1969-70	2.11	0.98	46.4
	1979-80	7.27	5.45	75.0
	1985-86	16.49	12.34	74.9
	1986-87	16.19	11.93	74.9
	1987-88	18.08	13.09	72.4
	1988-89	17.81	13.08	73.4
	1989-90	18.93	14.36	75.9
	1990-91	19.69	15.06	76.5
	1991-92	21.00	16.50	78.6
	1992-93	22.91	17.95	78.4
	1993-94	24.50	18.16	74.1
	1994-95	26.50	19.05	71.9
	1995-96	30.34	22.34	73.6
	1996-97*	33.73	25.06	74.3
J.N.P.T.	1989-90	0.70	—	—
	1990-91	2.03	—	—
	1991-92	2.80	—	—
	1992-93	3.01	—	—
	1993-94	3.39	—	—
	1994-95	5.01	—	—
	1995-96	6.87	—	—
	1996-97*	8.07	—	—
Visakhapatnam	1969-70	8.30	1.94	23.4
	1979-80	10.23	1.94	19.0
	1985-86	15.91	6.27	39.4
	1986-87	15.04	5.31	35.3
	1987-88	15.37	5.57	36.2
	1988-89	20.37	6.99	34.3
	1989-90	21.12	6.83	32.3
	1990-91	19.42	5.60	28.8
	1991-92	21.52	6.38	29.6
	1992-93	22.77	7.59	33.3
	1993-94	25.59	8.90	34.8
	1994-95	30.03	11.24	37.4
	1995-96	32.82	12.54	38.2
	1996-97*	34.50	13.38	38.8
Mormugao	1969-70	9.03	0.15	1.1
	1979-80	14.80	0.73	4.9
	1985-86	16.10	0.98	6.1
	1986-87	14.92	0.78	5.4
	1987-88	13.33	1.13	8.5
	1988-89	15.39	1.30	8.5
	1989-90	14.17	1.04	7.3
	1990-91	14.91	1.37	9.2
	1991-92	15.10	1.87	12.4
	1992-93	16.31	1.79	11.0
	1993-94	18.72	2.10	11.2
	1994-95	18.88	1.94	10.3
	1995-96	18.10	1.91	10.6
	1996-97*	17.31	1.23	7.1

Contd....

XI.3 Contd. SHARE OF TRAFFIC OF PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1969-70 TO 1996-97

(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
Paradip	1969-70	1.75	-	-
	1979-90	2.31	-	-
	1985-86	3.33	-	-
	1986-87	4.85	-	-
	1987-88	5.19	-	-
	1988-89	6.03	-	-
	1989-90	6.18	-	-
	1990-91	6.88	-	-
	1991-92	7.30	0.02	0.3
	1992-93	7.61	0.20	2.6
	1993-94	8.33	0.34	4.1
	1994-95	10.12	0.38	3.8
	1995-96	11.26	1.07	9.5
	1996-97*	11.58	1.69	14.6
Port of Tuticorin	1977-78	0.63	0.35	55.6
	1979-80	2.41	0.44	18.3
	1985-86	4.22	0.34	8.1
	1986-87	4.15	0.33	7.2
	1987-88	4.26	0.37	9.4
	1988-89	5.14	0.48	9.3
	1989-90	5.32	0.48	9.0
	1990-91	5.08	0.47	9.3
	1991-92	5.87	0.50	8.5
	1992-93	6.21	0.51	8.2
	1993-94	6.70	0.46	6.9
	1994-95	8.04	0.42	5.2
	1995-96	9.29	0.44	4.7
	1996-97*	9.17	0.43	4.7
New Mangalore	1977-78	0.38	0.20	52.6
	1979-80	0.90	0.21	23.3
	1985-86	3.69	0.41	11.1
	1986-87	5.43	0.53	9.8
	1987-88	6.11	0.46	8.2
	1988-89	7.08	0.57	7.3
	1989-90	7.66	0.58	7.6
	1990-91	8.03	0.61	7.6
	1991-92	8.27	0.62	7.5
	1992-93	7.09	0.63	8.9
	1993-94	8.63	0.65	7.5
	1994-95	8.01	0.74	9.2
	1995-96	8.88	0.96	10.8
	1996-97*	12.45	4.92	39.5
Grand Total				
	1969-70	54.35	19.02	35.0
	1977-78	66.23	26.21	39.6
	1979-80	78.49	28.78	36.7
	1985-86	120.04	54.63	45.5
	1986-87	124.37	56.10	45.1
	1987-88	133.68	63.15	47.2
	1988-89	146.43	64.33	43.9
	1989-90	148.14	63.60	42.9
	1990-91	152.86	65.88	43.1
	1991-92	157.60	69.30	44.0
	1992-93	166.58	73.61	44.2
	1993-94	179.26	76.97	42.9
	1994-95	197.26	82.15	41.6
	1995-96	215.34	91.07	42.3
	1996-97*	227.26	98.08	43.2

Source: Ministry of Surface Transport, Port Study Cell.
Note: Traffic handled includes transhipment cargo also.
*= Provisional

Contd....

XI. 4 MOVEMENT OF POL TRAFFIC ON RAILWAYS SINCE 1970-71

Year	Tonnes Originating ('000 MTS)	Earnings ('000Rs.)	Average Lead (Kms)	Earning (Paise/ Tonnes Kms)	Average Freight Col 3 Divided Col 2 (Rs/Tonnes)
1	2	3	4	5	6
1970-71	8857	464081	594	8.8	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
1985-86	18635	4705145	588	42.9	252.49
1986-87	19853	5395900	588	46.2	271.79
1987-88	21690	7175776	635	52.1	330.83
1988-89	22598	7639458	626	54.0	338.06
1989-90	24313	9135273	645	58.3	375.74
1990-91	24988	9617393	605	63.6	384.88
1991-92	25555	10264888	606	66.3	401.68
1992-93	26412	11733798	603	73.7	444.26
1993-94	25950	14596035	638	88.4	562.50
1994-95	27724	18009092	655	99.1	649.58
1995-96	28909	19993460	667	103.7	689.56
1996-97	28590	20590700	656	111.2	720.21

SOURCE Railway Board

XI. 5 RAIL FREIGHT RATES IN RESPECT OF PETROLEUM PRODUCTS

(Rs./Kl)

Effective Dates	Distance in Kilometres							
	100	300	500	800	1000	1500	2000	2500
1	2	3	4	5	6	7	8	9
	DANGEROUS (POL-PRODUCTS)							
01.04.1982	71.4	143.3	207.6	357.2	425.5	584.4	729.2	828.0
01.04.1983	78.0	175.2	267.0	393.9	478.5	655.5	796.5	919.5
15.04.1985	78.0	175.2	267.0	433.3	526.4	721.1	876.2	1011.5
01.12.1986	84.3	203.4	326.6	522.1	639.6	814.6	1123.2	1284.2
01.04.1988	89.4	215.6	346.2	553.4	678.0	969.5	1190.6	1361.8
01.04.1989	99.2	239.3	384.3	614.3	752.6	1076.1	1321.6	1511.6
01.04.1990	106.1	256.1	411.2	567.3	805.3	1151.4	1414.1	1617.4
01.10.1990	109.1	263.2	422.7	675.7	827.9	1183.7	1453.8	1662.8
16.08.1991	120.0	289.5	465.0	743.3	910.7	1302.1	1599.2	1829.1
01.04.1992	129.0	311.2	499.9	799.0	979.0	1399.8	1719.1	1966.3
01.04.1993	141.9	342.3	549.4	894.9	1096.5	1567.8	1925.4	2202.3
01.04.1994	141.9	347.0	579.4	929.3	1163.4	1684.4	2090.2	2390.8
01.04.1995	151.8	371.3	620.0	994.4	1244.8	1802.3	2236.5	2558.2
01.08.1996	167.0	408.4	682.0	1093.8	1369.3	1982.5	2460.2	2814.0
01.04.1997	187.0	457.4	763.8	1225.1	1533.6	2220.4	2755.4	3151.7
	NON-DANGEROUS (POL-PRODUCTS)							
01.06.1982	53.5	106.3	153.5	263.6	313.5	430.4	530.5	609.0
01.06.1983	59.2	130.5	197.5	290.9	352.9	482.7	586.1	676.3
01.06.1984	63.9	141.7	215.1	316.6	384.3	525.9	638.7	737.1
15.04.1985	63.9	141.7	215.1	348.3	422.7	578.5	702.6	810.8
11.12.1986	69.1	164.5	263.2	419.7	513.6	733.7	900.6	1029.8
01.04.1988	78.5	188.5	301.4	481.0	588.9	841.6	1033.2	1181.6
01.04.1989	87.2	208.7	334.5	533.9	653.7	934.2	1146.8	1311.6
01.04.1990	93.3	223.3	357.9	571.3	699.5	999.6	1227.1	1403.4
01.10.1990	95.9	229.6	368.0	587.3	719.1	1027.6	1261.5	1442.8
16.08.1991	105.5	252.6	404.8	646.0	791.0	1130.4	1387.7	1587.1
01.04.1992	109.5	261.7	409.0	668.4	818.2	1169.2	1435.1	1641.2
01.04.1993	133.4	320.4	514.5	836.4	1024.1	1464.2	1798.2	2056.5
01.04.1994	133.4	324.8	542.1	868.5	1086.6	1573.2	1952.1	2232.5
01.04.1995	142.7	347.5	580.0	929.3	1162.7	1683.3	2088.7	2388.8
01.08.1996	157.0	382.3	638.0	1022.2	1279.0	1851.6	2227.6	2827.7
01.04.1997	175.8	428.2	714.6	1144.9	1432.5	2073.8	2573.3	2943.0

Note : Dangerous POL - Include Motor Spirit, Benzene and other dangerous mineral oils.
Non-Dangerous Pol-Includes HSDO, LDO and other Petroleum & Hydrocarbon oil (Except Kerosene Oil)

Source : Railway Board.

2649/P&NG/F—9-A

XI. 6 CRUDE OIL, NATURAL GAS & PRODUCT PIPELINES IN INDIA

Type of Pipeline/Owner	Length (in Kms)		
	As on 1.4.95	As on 1.4.96	As on 1.4.97
CRUDE PIPELINES (ONSHORE)			
ONGC	762.79	791.29	809.79
OIL	1517.40	1524.40	1524.40
IOC	1229.60	1229.60	1229.60
HPCL		10.60	10.60
SUBTOTAL	**3509.79**	**3555.89**	**3574.39**
CRUDE PIPELINES (OFFSHORE)			
ONGC	525.27	667.27	667.27
IOC	5.70	5.70	5.70
SUBTOTAL	**530.97**	**672.97**	**672.97**
GAS PIPELINES (ONSHORE)			
ONGC	370.64	630.38	643.78
GAIL	3037.97	3115.67	3828.80
OIL	89.50	89.50	89.50
BPCL	2.20	2.20	2.20
SUBTOTAL	**3500.31**	**3837.75**	**4564.28**
GAS PIPELINES (OFFSHORE)			
ONGC	622.25	638.25	638.25
SUBTOTAL	**622.25**	**638.25**	**638.25**
PRODUCT PIPELINES (ONSHORE)			
IOC(AOD)	108.15	69.48	69.48
IOC	2527.19	3981.19	3981.19
BPCL	73.90	73.90	76.90
HPCL		191.00	191.00
ONGC	0.00	8.20	8.20
SUBTOTAL	**2709.24**	**4323.77**	**4326.77**
PRODUCT PIPELINES (OFFSHORE)			
BPCL	3.34	3.34	3.34
ONGC	48.00	48.00	48.00
SUBTOTAL	**51.34**	**51.34**	**51.34**
GRAND TOTAL	**10923.90**	**13079.97**	**13828.00**

* : Some part of the Pipeline has become redundent.

2649/P&NG/F—9-B

XII. 1 RETAIL OUTLETS IN INDIA AS ON 1ST JANUARY OF EACH YEAR

(NUMBERS)

Year	Retail / Outlets	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
1975	Nos.	3173	1867	1206	3546	525	163	10480
	%	30.3	17.8	11.5	33.8	5.0	1.6	100
1980	Nos.	3296	3198@		4231	975	173	22873
	%	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	1.6	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
1987	Nos.	3614	3630		5048	1126	225	13643
	%	36.4	26.6		37.0	8.3	1.6	100
1988	Nos.	3690	3717		5191	1174	235	14007
	%	26.3	26.5		37.1	8.4	1.7	100
1989	Nos.	3769	3784		5313	1194	250	14310
	%	26.3	26.5		37.1	8.4	1.7	100
1990	Nos.	3847	3829		5452	1228	268	14264
	%	26.3	26.2		37.3	8.4	1.8	100
1991	Nos.	3907	3910		5542	1258	276	14893
	%	26.2	26.3		37.2	8.4	1.9	100
1992	Nos.	3976	3946		5602	1287	281	15092
	%	26.3	26.2		37.1	8.5	1.9	100
1993	Nos.	4016	3968		5605	1294	283	15166
	%	26.5	26.2		37.0	8.5	1.8	100
1994	Nos.	4045	4009		5637	1315	283	15289
	%	26.5	26.2		36.9	8.6	1.8	100
1995	Nos.	4146	4094		5889	1364	283	15776
	%	26.3	26.0		37.3	8.6	1.8	100
1996	Nos.	4240	4199		6140	1403	291	16273
	%	26.1	25.8		37.7	8.6	1.8	100
1997	Nos.	4332	4279		6375	1426	303	16715
	%	25.9	25.7		38.1	8.5	1.8	100

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

XII. 2 STATE-WISE NUMBER OF RETAIL OUTLETS, MPDC'S, LDO/SKO DEALERS AND LPG DISTRIBUTORS AS ON 1.4.1997

(NUMBERS)

State/Union Territories	Retail outlets	MPDC	LDO/SKO dealers	LPG distributors
1	2	3	4	5
A. STATES				
1. Andhra Pradesh	1266	18	605	459
2. Arunachal Pradesh	32	2	34	17
3. Assam	365	1	359	143
4. Bihar	1104	9	430	211
5. Goa	66	1	20	31
6. Gujarat	1061	12	489	372
7. Haryana	565	17	145	173
8. Himachal Pradesh	90	1	26	69
9. Jammu & Kashmir	124	1	40	87
10. Karnataka	1007	4	319	295
11. Kerala	747	1	239	201
12. Madhya Pradesh	1006	18	368	308
13. Maharashtra	1638	16	728	713
14. Manipur	31	3	35	17
15. Meghalaya	58	-	35	18
16. Mizoram	14	1	17	13
17. Nagaland	30	1	19	17
18. Orissa	354	7	176	104
19. Punjab	1024	14	238	250
20. Rajasthan	990	28	245	224
21. Sikkim	13	-	12	2
22. Tamil Nadu	1508	-	461	388
23. Tripura	32	1	39	14
24. Uttar Pradesh	2273	64	692	665
25. West Bengal	1069	12	458	311
Total (States)	**16467**	**232**	**6229**	**5102**
B. UNION TERRITORIES				
26. A.N. Islands	3	-	1	1
27. Chandigarh	37	-	11	30
28. D.N. Haveli	4	-	2	1
29. Delhi	288	-	108	278
30. Daman & Diu	6	-	5	2
31. Pondicherry	30	-	8	11
32. Lakshdweep	0	-	0	1
Total (UTS)	**368**	**-**	**135**	**324**
GRAND TOTAL (A&B)	**16835**	**232**	**6364**	**5426**

MPDC: Multi-purpose Distribution Centres.

XII. 3 STATE-WISE NUMBER OF LPG DOMESTIC CONSUMERS AS ON 1.4.1997

(FIGS. IN LAKHS)

	IOC (MD)	IOC (AOD)	IOC TOTAL	BPC	HPC	TOTAL
STATES						
Andhra Pradesh	8.34	0.00	8.34	3.96	11.92	24.21
Arunachal Pradesh	0.09	0.26	0.36	0.00	0.00	0.36
Assam	1.93	2.40	4.32	0.00	0.00	4.32
Bihar	7.24	0.00	7.24	0.89	0.94	9.07
Delhi	11.64	0.00	11.64	4.88	2.30	18.82
Goa	0.01	0.00	0.01	0.64	1.08	1.72
Gujarat	12.56	0.00	12.56	4.44	4.73	17.93
Haryana	4.87	0.00	4.87	2.60	1.40	10.71
Himachal Pradesh	3.82	0.00	3.82	0.12	0.52	6.94
Jammu & Kashmir	1.44	0.00	1.44	0.38	2.17	3.73
Karnataka	5.51	0.00	5.51	3.35	6.32	15.19
Kerala	7.11	0.00	7.11	2.48	1.28	10.86
Madhya Pradesh	7.54	0.00	7.54	2.37	4.96	14.87
Maharashtra	2.63	0.00	2.63	23.81	21.12	47.56
Manipur	0.20	0.48	0.68	0.00	0.00	0.68
Meghalaya	0.22	0.21	0.43	0.00	0.00	0.43
Mizoram	0.35	0.27	0.61	0.00	0.00	0.61
Nagaland	0.14	0.23	0.37	0.00	0.00	0.37
Orissa	1.60	0.00	1.60	0.38	1.96	3.94
Punjab	7.40	0.00	7.40	2.55	1.90	11.85
Rajasthan	4.98	0.00	4.98	2.94	2.83	10.75
Sikkim	0.24	0.00	0.24	0.00	0.00	0.24
Tamilnadu	15.69	0.00	15.69	4.52	2.73	22.94
Tripura	0.19	0.25	0.45	0.00	0.00	0.45
Uttar Pradesh	26.82	0.00	26.82	7.44	3.43	37.69
West Bengal	10.19	0.00	10.19	1.31	3.34	14.84
Total	**142.74**	**4.10**	**146.83**	**69.06**	**74.93**	**290.82**
UNION TERRITORIES						
Andaman & Nicobar	0.10	0.00	0.10	0.00	0.00	0.10
Chandigarh	0.94	0.00	0.94	0.18	0.32	1.44
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.05	0.05
Daman & Diu	0.00	0.00	0.00	0.00	0.09	0.09
Lakshadweep	0.01	0.00	0.01	0.00	0.00	0.01
Pondicherry	0.30	0.00	0.30	0.07	0.15	0.53
Total	**1.35**	**0.00**	**1.35**	**0.25**	**0.62**	**2.23**
ALL INDIA	**144.09**	**4.10**	**148.19**	**69.31**	**75.55**	**293.05**

XIII.1 GROSS PRODUCTION OF ENERGY BY VARIOUS SOURCES IN INDIA

YEAR	Coal & Lignite			Hydro-carbon			Power Million (Kwh)			
	Coal	Lignite	Total	Natural Gas (MM3)	Crude Petroleum	Petroleum Products	Thermal	Hydel	Nuclear	Total
	(—(Million Tonnes)—)				(—'000' Tonnes)—)					
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	1585	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	99.63	3.03	102.66	2368	8446	22055	43303	33302	2626	79231
1976-77	100.99	4.02	105.01	2428	8698	22732	50245	34836	3252	88333
1977-78	100.98	3.58	104.56	2839	10763	24670	52495	37961	1740	92196
1978-79	101.95	3.30	105.25	2811	11633	25671	53420	47138	2770	103328
1979-80	103.94	2.90	106.84	2767	11766	27228	57155	45494	2876	105525
1980-81	113.91	5.11	119.02	2358	10507	25346	61301	46542	3001	110844
1982-83	124.23	6.31	130.54	3851	16194	29717	69392	49597	3021	122010
1983-84	130.50	6.93	137.43	4936	21063	32761	79880	48309	2022	130211
1984-85	138.22	7.30	145.52	5961	26020	34793	88535	49867	3494	139896
1985-86	147.41	7.80	155.21	7241	28990	35546	98770	53785	4078	156633
1986-87	154.20	8.05	162.25	8134	30168	42735	114119	50933	4985	170037
1987-88	165.77	9.43	175.20	9853	30480	45867	128820	53760	5020	187610
1988-89	179.72	11.16	190.88	11467	30357	47808	149464	47396	5034	201894
1989-90	194.60	12.64	213.69	16988	34087	52143	178522	61996	4623	245141
1990-91	200.89	12.64	213.69	16988	34087	52143	178522	61996	4623	245141
1991-92	211.73	14.11	225.50	17998	33021	52201	186452	71535	6244	264231
1992-93	229.28	15.97	243.83	18645	30346	52213	208551	72599	5561	286711
1993-94	238.26	16.62	254.88	18060	26950	54435	224485	69833	6748	301066
1994-95	246.04	16.90	262.94	18335	27026	55305	247618	70311	5394	323323
1995-96	253.80	17.20	271.00	19381	32239	57400	262900	82500	5600	351000
1996-97	270.13	22.14	292.27	22308	35170	58320	299600	72500	8000	380100
	285.66	22.54	308.20	22745	32901	62500	316900	68600	9000	394500

*: Provisional. @ : Includes RBF and LPG production from Natural Gas

kwh : Kilowatt Hour.

Source : (i) Central Electricity Authority and Economic Survey 1997-98.

(ii) Coal Statistics — Coal Controls Organisation, Ministry of Coal

XIII. 2 TRENDS IN PRODUCTION OF PRIMARY COMMERCIAL ENERGY

Energy From	Unit	Production				
		1950-51	1960-61	1970-71	1980-81	1990-91
Coal	Million Tonnes	33	55.67	72.95	114.01	211.73
Lignite	"	-	0.05	3.39	4.80	14.07
Crude Oil	"	0.26	0.45	6.82	10.51	33.02
Natural Gas	MCM	-	-	1445	2358	17998
Hydro Power	Bkwh	2.52	7.84	25.25	46.54	71.54
Nuclear Power	"	"	"	2.42	3.00	6.24

XIII. 3 ENERGY CONSUMPTION BY FUEL & BY SECTOR

a. PERCENTAGE SHARE OF DIFFERENT FUELS IN COMMERCIAL ENERGY CONSUMPTION

	1953-54	1960-61	1970-71	1980-81	1990-91*
Coal	79.6	74.1	59.1	52.6	39.0
Oil & Gas	17.1	20.9	31.3	35.7	43.4
Electricity	3.3	5.0	9.6	11.7	17.6
Total	100.0	100.0	100.0	100.0	100.0

*Provisional

b. PERCENTAGE SHARE IN FINAL ENERGY CONSUMPTION BY DIFFERENT SECTOR

Sector	Percentage share in Consumption				
	1953-54	1960-61	1970-71	1980-81	1990-91
Industry	39.8	40.7	51.6	57.0	50.4
Transport	46.2	44.9	29.4	23.5	24.5
Household	9.9	10.6	14.3	12.3	13.8
Agriculture	1.7	1.8	3.8	6.1	9.0
Others	2.4	2.0	0.9	1.1	2.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Eighth five year plan Document 1992-97.

XIII.4 GROSS DOMESTIC PRODUCT OF CRUDE PETROLEUM & NATURAL GAS, COAL AND LIGNITE AT 1980-81 PRICES

(Rs./Lakhs)

Year	Crude Petroleum & Natural Gas	Coal & Lignite
1980-81	403	1458
1986-87	1448	2092
1987-88	1511	2317
1988-89	1641	2485
1989-90	1868	2521
1990-91	1933	2680
1991-92	1943	2813
1992-93	1948	3050
1993-94	2016	3145

Source: Central Statistical Organisation.

PART-II
INTERNATIONAL PETROLEUM STATISTICS
(120-158)

PART-II
INTERNATIONAL PETROLEUM STATISTICS
(120-158)

XIV. 1(B) WORLD PROVED RESERVES OF NATURAL GAS AT END 1996

Country	Thousand million barrels	Thousand million tonnes	Share of total	R/P ratio
USA	4.68	165.1	3.3%	8.7
Canada	1.93	68.1	1.4%	12.6
Mexico	1.92	67.7	1.4%	61.4
Total North America	**8.53**	**300.9**	**6.1%**	**11.8**
Argentina	0.62	21.9	0.4%	21.4
Bolivia	0.13	4.5	0.1%	40.1
Brazil	0.15	5.4	0.1%	28.9
Colombia	0.23	8.3	0.2%	49.7
Ecuador	0.10	3.7	0.1%	*
Trinidad & Tobago	0.35	12.4	0.3%	49.6
Venezuela	4.01	141.6	2.8%	*
Other S. & Cent. America	0.30	10.8	0.2%	*
Total S. & Cent. America	**5.89**	**208.6**	**4.2%**	**70.2**
Denmark	0.11	3.9	0.1%	17.0
Germany	0.33	11.6	0.2%	18.9
Hungary	0.09	3.3	0.1%	22.3
Italy	0.30	10.5	0.2%	14.7
Netherlands	1.81	64.1	1.3%	20.8
Norway	1.35	47.7	1.0%	33.0
Romania	0.40	14.0	0.3%	23.0
United Kingdom	0.70	24.7	0.5%	8.3
Other Europe	0.33	11.6	0.2%	24.6
Total Europe	**5.42**	**191.4**	**3.9%**	**18.6**
Azerbaijan	0.85	30.0	0.6%	*
Kazakhstan	1.84	65.1	1.3%	*
Russian Federation	48.63	1717.2	34.4%	82.1
Turkmenistan	2.89	102.0	2.0%	83.3
Ukraine	1.14	40.1	0.8%	62.7
Uzbekistan	1.89	66.9	1.3%	39.2
Other Former Soviet Union	0.04	1.3	†	93.3
Total Former Soviet Union	**57.28**	**2022.6**	**40.4%**	**81.1**
Bahrain	0.15	5.2	0.1%	20.4
Iran	21.00	741.6	14.9%	*
Iraq	3.34	118.0	2.4%	*
Kuwait	1.50	52.9	1.1%	*
Oman	0.85	30.0	0.6%	*
Qatar	7.08	250.0	5.0%	*
Saudi Arabia	5.35	189.1	3.8%	*
United Arab Emirates	5.80	204.9	4.1%	*
Yemen	0.48	16.9	0.3%	*
Other Middle East	0.24	8.5	0.2%	*
Total Middle East	**45.79**	**1617.1**	**32.5%**	*
Algeria	3.69	130.3	2.6%	56.0
Egypt	0.58	20.4	0.4%	50.1
Libya	1.31	46.3	0.9%	*
Nigeria	2.97	104.7	2.1%	*
Other Africa	0.76	26.9	0.5%	*
Total Africa	**9.31**	**328.6**	**6.5%**	*
Australia	0.55	19.4	0.4%	18.5
Bangladesh	0.29	10.2	0.2%	38.2
Brunei	0.40	14.1	0.3%	34.5
China	1.17	41.4	0.8%	58.8
India	0.69	24.2	0.5%	33.5
Indonesia	2.05	72.3	1.5%	30.8
Malaysia	2.27	80.2	1.6%	64.2
Pakistan	0.62	22.0	0.4%	41.0
Papua New Guinea	0.04	1.5	†	*
Thailand	0.20	7.1	0.1%	18.0
Vietnam	0.14	5.0	0.1%	*
Other Asia Pacific	0.69	24.5	0.5%	73.5
Total Asia Pacific	**9.11**	**321.9**	**6.4%**	**40.1**
TOTAL WORLD	**141.33**	**4991.1**	**100.0%**	**62.2**
Of which OECD	13.86	489.5	9.8%	13.6
European Union 15	3.33	117.5	2.4%	15.0

* Over 100 years
† Less than 0.05
Source: B.P. Statistical Review of World Energy, June 1997

XIV. 2 WORLD CRUDE OIL *PRODUCTION 1988-1996

(Million tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Change 1996 over 1995	1996 share of total
USA	459.6	429.5	417.1	423.4	413.5	397.5	388.0	384.0	382.9	-0.3%	11.4%
Canada	94.6	92.1	92.3	92.7	96.6	101.7	106.1	111.5	114.2	+2.4%	3.4%
Mexico	143.4	143.8	147.1	154.5	154.5	154.6	155.2	151.3	163.6	+8.1%	4.9%
Total North America	**697.7**	**665.5**	**656.5**	**670.6**	**664.7**	**653.8**	**649.2**	**646.9**	**660.7**	**2.1%**	**19.7%**
Argentina	24.1	24.7	25.9	26.3	29.6	31.6	35.2	37.9	40.7	+7.4%	1.2%
Brazil	28.8	30.8	32.6	32.2	32.4	33.0	34.3	35.5	40.3	+13.5%	1.2%
Colombia	19.4	20.8	22.7	22.0	22.6	23.4	23.5	30.2	32.4	+7.4%	1.0%
Ecuador	15.8	14.6	14.9	15.7	16.8	18.0	19.8	20.2	20.1	-0.2%	0.6%
Peru	7.2	6.6	6.6	5.9	5.9	6.4	6.5	6.2	6.9	-1.4%	0.2%
Trinidad & Tobago	7.7	7.6	7.7	7.5	7.2	6.7	7.0	7.0	6.9	-1.3%	0.2%
Venezuela	103.5	103.7	115.9	129.3	129.6	134.0	142.0	152.4	162.4	+6.6%	4.8%
Other S. & Cent. America	3.6	3.6	3.6	3.6	3.6	3.9	4.2	4.6	4.9	+5.9%	0.1%
Total S. & Cent. America	**210.2**	**212.4**	**229.8**	**242.4**	**247.7**	**257.0**	**272.4**	**294.0**	**313.9**	**+6.8%**	**9.3%**
Denmark	4.7	5.5	6.0	7.0	7.8	8.3	9.1	9.2	10.3	12.0%	0.3%
Italy	4.8	4.6	4.7	4.3	4.5	4.6	4.9	5.2	5.4	+3.6%	0.2%
Norway	56.2	74.5	81.7	93.3	106.9	114.1	129.4	138.5	155.5	+12.2%	4.6%
Romania	9.8	9.6	8.1	7.0	6.8	6.9	7.0	7.0	6.8	-2.0%	0.2%
United Kingdom	114.5	91.7	91.6	91.3	94.3	100.2	126.9	130.3	129.9	-0.3%	3.9%
Other Europe	26.7	25.5	25.8	24.7	24.1	22.5	23.4	21.4	20.2	-5.8%	0.6%
Total Europe	**216.7**	**211.5**	**217.5**	**227.5**	**244.4**	**256.6**	**300.6**	**311.6**	**328.1**	**+5.3%**	**9.8%**
Azerbaijan	13.7	13.2	12.5	11.7	11.1	10.3	9.6	9.2	9.1	-0.7%	0.3%
Kazakhstan	25.0	25.4	25.8	26.6	25.8	23.0	20.3	20.6	23.0	+11.3%	0.7%
Russian Federation	568.8	554.9	516.0	462.0	399.0	354.0	317.8	306.8	301.1	-1.9%	9.0%
Uzbekistan	2.4	2.7	2.8	2.8	3.3	4.0	5.5	7.5	7.5	-	0.2%
Other Former Soviet Union	13.8	13.8	13.6	12.8	12.2	11.0	10.7	10.4	12.0	+15.1%	0.3%
Total Former Soviet Union	**623.7**	**609.9**	**570.7**	**515.9**	**451.4**	**402.3**	**363.9**	**354.5**	**353.6**	**-0.5%**	**10.5%**
Iran	116.3	142.3	161.4	173.4	174.7	182.7	183.1	183.3	183.8	+0.3%	5.5%
Iraq	136.0	138.5	105.1	13.7	25.9	22.6	25.0	26.3	28.8	+9.6%	0.8%
Kuwait	73.5	77.7	62.1	9.9	54.7	96.0	104.0	104.4	107.2	+2.7%	3.2%
Oman	31.1	32.2	34.4	35.5	37.2	38.9	40.5	42.7	44.3	+3.8%	1.3%
Qatar	17.2	19.2	20.6	19.9	23.0	21.3	20.8	21.3	21.8	+2.4%	0.6%
Saudi Arabia	275.5	270.1	341.3	426.7	440.7	431.1	426.1	426.7	428.8	+0.5%	12.8%
Syria	14.0	17.7	21.1	24.5	26.9	29.5	29.4	31.1	31.4	+1.0%	0.9%
United Arab Emirates	73.9	92.7	104.9	121.1	115.3	111.3	113.1	113.7	117.3	+3.2%	3.5%
Yemen	8.2	8.5	8.7	9.4	8.7	9.9	16.4	16.7	17.5	+5.0%	0.5%
Other Middle East	2.5	2.5	2.4	2.5	2.5	2.5	2.4	2.4	2.4	+0.3%	0.1%
Total Middle East	**748.0**	**801.3**	**861.9**	**836.5**	**909.6**	**945.8**	**960.8**	**968.4**	**983.3**	**+1.5%**	**29.2%**
Algeria	53.6	54.7	57.5	57.7	56.6	56.7	56.0	56.8	60.0	+5.6%	1.8%
Angola	22.3	22.6	23.6	24.8	26.4	25.0	26.1	30.4	35.1	+15.3%	1.0%
Cameroon	8.3	8.1	7.8	7.2	6.8	6.6	5.8	5.4	5.2	-4.3%	0.2%
Congo	7.0	8.0	8.0	8.1	8.6	9.5	9.6	9.3	11.4	+23.2%	0.3%
Egypt	44.2	44.5	45.5	45.4	46.0	47.5	46.5	46.6	45.2	-3.0%	1.3%
Gabon	8.9	10.2	13.5	14.7	14.5	15.2	16.8	17.8	18.1	1.7%	0.5%
Libya	50.9	55.7	68.7	73.8	70.8	67.2	68.6	69.0	69.1	+0.3%	2.1%
Nigeria	71.9	85.1	89.8	93.7	96.9	97.8	97.6	98.1	106.0	+8.0%	3.2%
Tunisia	4.9	5.0	4.5	5.2	5.2	4.7	4.4	4.3	4.2	-1.5%	0.1%
Other Africa	2.3	1.8	1.9	1.7	1.6	2.0	2.0	2.8	5.3	+92.7%	0.2%
Total Africa	**274.4**	**295.6**	**320.7**	**332.3**	**333.4**	**332.2**	**333.4**	**340.3**	**359.6**	**+5.6%**	**10.7%**
Australia	26.0	24.5	28.4	26.9	26.5	24.9	26.9	25.4	27.0	+6.1%	0.8%
Brunei	7.3	7.3	7.4	8.0	9.0	8.6	8.8	8.6	8.1	-5.3%	0.2%
China	137.1	137.6	138.3	141.0	142.0	144.0	146.1	149.0	158.5	+6.4%	4.7%
India	32.7	35.0	34.8	33.1	30.2	29.0	33.2	37.2	35.0	-5.9%	1.0%
Indonesia	65.0	69.2	71.9	78.3	74.1	74.3	74.3	73.9	77.2	+4.5%	2.3%
Malaysia	26.1	28.3	29.9	31.1	31.7	31.1	31.7	34.0	34.1	+0.3%	1.0%
Papua New Guinea	-	-	-	-	2.5	5.9	5.7	4.7	5.0	+6.3%	0.2%
Vietnam	0.7	1.5	2.7	4.0	5.5	6.3	7.1	7.7	8.6	+12.7%	0.3%
Other Asia Pacific	8.2	8.5	9.4	10.1	10.9	10.8	10.3	9.9	10.1	+2.5%	0.3%
Total Asia Pacific	**303.0**	**311.9**	**322.9**	**332.4**	**332.4**	**334.8**	**344.0**	**350.2**	**363.5**	**+3,8%**	**10.8%**
TOTAL WORLD	**3073.7**	**3108.1**	**3180.1**	**3157.8**	**3183.5**	**3182.5**	**3224.3**	**3265.9**	**3361.6**	**+2.9%**	**100.0%**
of which OECD	924.8	886.5	889.4	914.8	925.1	925.0	966.1	973.5	1005.7	+3.3%	29.9%
OPEC	1037.1	1108.9	1199.1	1197.4	1262.3	1294.8	1310.7	1325.7	1362.5	+2.8%	40.5%
Non-OPEC†	1412.9	1389.3	1410.3	1444.4	1469.8	1485.4	1549.8	1585.7	1646.6	+3.8%	49.0%

* Includes crude oil, shale oil, oil sands and NGLs (natural gas liquids-the liquid content of natural gas where this is recovered separately)
Excludes liquid fuels from other sources such as coal derivatives
†Excludes Former Soviet Union

XIV.3 CRUDE OIL PRODUCTION BY OPEC MEMBER COUNTRIES

(Million Tonnes)

OPEC Countries	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 (P)
Algeria	52	48	49	53	54	55	58	58	56	56	56	57	60
Indonesia	78	65	69	67	65	69	72	78	74	74	74	74	77
Iran	74	110	95	116	116	142	161	173	175	178	183	183	184
Iraq	130	71	86	117	136	139	105	14	26	22	25	26	29
Kuwait	72	54	67	52	74	78	62	10	55	96	104	104	107
Libya	88	53	50	48	51	56	69	74	71	67	69	69	69
Nigeria	102	73	72	66	72	85	90	94	97	95	98	98	106
Qatar	22	16	17	15	17	19	21	20	23	21	21	21	22
Saudi Arabia	493	182	260	223	279	273	346	431	445	433	426	427	429
U.A.E.	112	49	58	62	57	77	88	104	96	113	113	114	117
Venezuela	116	90	97	99	104	104	116	129	130	134	142	152	162
Total	1358	833	946	935	1049	1122	1217	1216	1280	1304	1311	1326	1363

(P) = Provisional.
Source: BP Statistical Review of World Energy 1997.

XIV. 4 WORLD PRODUCTION OF NATURAL GAS* 1988-96

(Million tonnes Oil equivalent)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Change 1996 over 1995	1996 share of total
USA	443.5	449.8	462.8	459.4	463.1	468.3	487.6	481.4	492.2	+2.3%	24.5%
Canada	81.7	87.0	89.4	94.8	104.5	112.9	122.3	133.4	137.7	+3.2%	6.9%
Mexico	23.7	24.0	24.1	25.1	25.0	25.0	25.8	25.3	28.1	+11.0%	1.4%
Total North America	**548.9**	**560.8**	**576.3**	**579.3**	**592.6**	**606.2**	**635.7**	**640.1**	**658.0**	**+2.8%**	**32.8%**
Argentina	16.2	17.1	16.1	17.9	18.1	19.5	20.0	22.6	26.1	+15.5%	1.3%
Bolivia	2.5	2.6	2.7	2.7	2.7	2.7	3.0	2.8	2.9	+1.0%	0.1%
Brazil	3.3	3.5	3.4	3.5	3.6	4.0	4.1	4.5	4.8	+7.5%	0.2%
Colombia	3.9	3.6	3.7	3.9	4.0	4.2	4.1	4.0	4.2	+6.8%	0.2%
Trinidad & Tobago	4.6	4.6	4.7	5.1	5.4	5.3	5.6	5.5	6.4	+15.3%	0.3%
Venezuela	17.1	17.6	19.8	19.7	19.5	21.0	22.2	26.8	28.8	+7.5%	1.4%
Other S. & Cent. America	1.7	2.1	2.2	2.0	2.3	2.2	2.5	2.5	2.5	+3.8%	0.1%
Total S. & Cent. America	**49.3**	**51.1**	**52.6**	**54.8**	**55.6**	**58.9**	**61.5**	**68.7**	**75.7**	**+10.3%**	**3.6%**
Denmark	2.2	2.8	2.8	3.6	3.7	4.1	4.4	4.8	5.8	+21.4%	0.3%
Germany	15.0	14.2	14.3	13.2	13.4	13.4	14.0	14.5	15.7	+8.3%	0.8%
Hungary	4.9	4.7	3.8	3.8	3.6	3.9	3.7	3.7	3.6	-4.6%	0.2%
Italy	14.9	15.3	15.6	15.7	16.3	17.5	18.6	18.3	18.2	-0.8%	0.9%
Netherlands	49.9	54.1	54.5	62.1	62.2	63.0	59.7	60.3	68.2	+13.2%	3.4%
Norway	26.8	27.7	25.0	24.6	26.5	26.0	27.7	28.0	36.8	+31.4%	1.8%
Romania	29.5	26.5	22.8	20.5	18.3	17.3	15.7	15.1	14.7	-3.1%	0.7%
United Kingdom	38.0	37.1	41.0	45.7	46.4	54.8	58.5	64.0	76.1	+19.0%	3.8%
Other Europe	13.4	13.7	12.3	12.4	12.1	12.8	12.3	12.3	11.7	-5.2%	0.6%
Total Europe	**194.6**	**196.1**	**192.1**	**201.6**	**202.5**	**212.8**	**214.6**	**221.0**	**250.8**	**+13.4%**	**12.5%**
Azerbaijan	10.0	9.3	8.3	7.2	6.6	5.7	5.4	5.5	5.3	-4.5%	0.3%
Kazakhstan	6.0	5.6	6.0	6.6	6.8	5.6	3.8	5.0	5.4	+8.5%	0.3%
Russian Federation	495.2	517.0	538.2	539.8	537.6	518.8	509.8	499.9	505.0	+1.0%	25.1%
Turkmenistan	74.1	75.5	73.7	70.8	50.5	54.8	29.9	27.1	29.6	+9.0%	1.5%
Ukraine	27.2	25.9	23.6	20.5	17.6	16.1	15.3	15.3	15.4	+1.1%	0.8%
Uzbekistan	33.5	34.5	34.3	35.2	35.9	37.8	39.6	40.8	41.1	+0.8%	2.0%
Other Former Soviet Union	0.6	0.6	0.5	0.5	0.5	0.4	0.3	0.3	0.3	-	†
Total Former Soviet Union	**646.6**	**668.4**	**684.6**	**680.6**	**655.5**	**639.2**	**604.1**	**593.9**	**602.1**	**+1.4%**	**30.0%**
Bahrain	4.8	5.0	5.2	5.0	5.8	6.2	6.4	6.5	6.5	-	0.3%
Iran	18.0	20.0	20.8	23.2	22.5	24.4	28.6	31.6	34.3	+8.5%	1.7%
Kuwait	6.2	7.3	3.8	0.5	2.4	4.0	5.4	5.4	5.4	-0.2%	0.3%
Oman	2.1	2.2	2.3	2.4	2.6	2.5	2.7	3.4	3.6	+4.1%	0.2%
Qatar	5.3	5.6	5.7	6.9	11.4	12.2	12.2	12.2	12.2	-	0.6%
Saudi Arabia	26.2	26.8	27.5	28.8	30.6	32.3	33.9	34.4	37.2	+8.0%	1.9%
United Arab Emirates	15.6	18.3	18.1	21.4	20.0	20.6	23.2	26.9	31.5	+16.9%	1.6%
Other Middle East	5.9	6.8	5.0	3.1	3.6	3.8	4.4	4.4	4.5	+1.1%	0.2%
Total Middle East	**84.1**	**92.0**	**88.4**	**91.3**	**98.9**	**106.0**	**116.8**	**124.8**	**135.2**	**+8.2%**	**6.8%**
Algeria	38.7	41.8	44.3	47.8	49.5	50.5	46.5	54.7	59.3	+8.5%	3.0%
Egypt	5.4	5.9	6.1	7.0	7.6	9.0	9.5	9.9	10.4	+4.7%	0.5%
Libya	4.6	5.7	5.2	5.7	5.9	5.6	5.6	5.6	5.6	+1.3%	0.3%
Nigeria	3.3	3.8	3.6	3.5	3.8	3.8	4.0	4.1	4.2	+1.4%	0.2%
Other Africa	0.8	0.8	0.7	0.6	0.6	2.2	2.3	2.4	2.7	+16.4%	0.1%
Total Africa	**52.8**	**58.0**	**59.9**	**64.6**	**67.4**	**71.1**	**67.9**	**76.7**	**82.2**	**+7.3%**	**4.1%**
Australia	13.8	16.0	18.6	19.5	21.1	22.0	25.3	26.8	26.8	+0.1%	1.3%
Bangladesh	**3.9**	**4.1**	**4.3**	**4.6**	**5.1**	**5.5**	**6.0**	**6.7**	**6.8**	**+1.9%**	**0.3%**
Brunei	8.0	7.9	8.0	8.2	8.8	9.3	9.4	10.4	10.4	+0.2%	0.5%
China	11.9	12.6	12.8	13.4	13.6	14.6	14.9	15.8	17.9	+13.1%	0.9%
India	8.0	9.6	11.1	12.8	14.3	14.5	15.6	16.9	18.4	+8.6%	0.9%
Indonesia	35.0	37.2	40.8	46.4	48.9	50.6	56.6	57.7	59.9	+3.8%	3.0%
Malaysia	14.8	15.7	16.0	18.3	20.5	22.4	23.5	26.0	31.8	+22.4%	1.6%
Pakistan	8.8	9.6	10.4	10.6	10.9	11.6	12.3	12.6	13.7	+8.1%	0.7%
Thailand	4.7	4.9	4.9	6.3	6.8	7.6	8.6	9.0	10.1	+11.7%	0.5%
Other Asia Pacific	11.1	8.4	8.3	7.9	8.2	8.5	8.5	8.2	8.9	+8.1%	0.5%
Total Asia Pacific	**120.0**	**126.0**	**135.2**	**148.0**	**158.2**	**166.6**	**180.7**	**190.1**	**204.7**	**+7.6%**	**10.2%**
TOTAL WORLD	**1696.3**	**1752.4**	**1789.1**	**1820.2**	**1830.7**	**1860.8**	**1881.3**	**1915.3**	**2008.7**	**+4.9%**	**100.0%**
of which OECD	722.0	740.8	761.2	776.8	795.6	820.2	856.8	869.0	917.9	+5.6%	45.7%
European Union 15	125.9	130.2	135.0	147.1	148.8	159.2	161.7	168.1	189.7	+12.9%	9.4%
Other EMEs@	286.1	305.2	311.7	333.2	352.6	374.2	395.5	427.7	464.5	+8.6%	23.1%

* Excluding gas flared or recycled

†Less then 0.05

@Excludes Central Europe and Former Soviet Union.

XIV.5 WORLD CONSUMPTION OF NATURAL GAS 1988-96*

(Million Tonnes Oil equivalent)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Change 1996 over 1995	1996 share of total
USA	467.5	488.5	486.3	494.1	507.3	524.9	536.5	558.5	569.2	+1.9%	28.9%
Canada	52.8	57.5	55.6	56.7	60.2	61.6	63.8	63.8	66.4	+4.0%	3.4%
Mexico	23.7	24.3	25.0	24.9	24.9	25.4	26.5	26.7	28.1	+5.2%	1.4%
Total North America	**544.0**	**570.3**	**566.9**	**575.7**	**592.4**	**611.9**	**626.8**	**649.0**	**663.7**	**+2.3%**	**33.7%**
Argentina	18.2	19.1	18.3	19.9	20.1	21.2	21.9	24.4	27.9	+14.6%	1.4%
Brazil	3.3	3.5	3.4	3.5	3.6	4.0	4.1	4.5	4.7	+6.1%	0.2%
Chile	0.9	1.4	1.5	1.3	1.5	1.4	1.5	1.5	1.5	+3.3%	0.1%
Colombia	3.9	3.6	3.7	3.9	4.0	4.2	4.1	4.0	4.2	+6.8%	0.2%
Venezuela	17.1	17.6	19.8	19.7	19.5	21.0	22.2	27.0	28.8	+6.7%	1.5%
Other S. & Cent. America	5.8	5.8	6.0	6.4	6.9	6.8	7.5	7.5	8.4	+12.3%	0.4%
Total S. & Cent. America	**49.2**	**51.0**	**52.7**	**54.7**	**55.6**	**58.6**	**61.3**	**68.9**	**75.5**	**+10.0%**	**3.8%**
Austria	4.4	4.7	5.2	5.4	5.4	5.7	5.8	6.1	6.6	+8.1%	0.3%
Belgium & Luxembourg	8.4	9.4	9.5	9.0	9.0	9.9	9.7	10.6	11.6	+9.6%	0.6%
Bulgaria	5.0	5.1	4.8	4.1	3.5	3.3	3.3	4.0	4.2	+3.2%	0.2%
Czech Republic	4.4	4.6	4.9	5.3	5.2	5.3	5.4	5.9	6.9	+16.3%	0.4%
Denmark	1.6	1.7	1.8	1.9	2.0	2.2	2.5	2.9	3.4	+17.8%	0.2%
Finland	1.4	1.9	2.3	2.4	2.5	2.6	2.8	2.9	3.0	+4.4%	0.2%
France	23.6	24.4	26.4	27.5	28.3	29.0	27.8	29.6	29.0	-1.8%	1.5%
Germany	52.3	53.6	53.9	56.6	56.7	59.8	61.1	67.0	75.2	+12.3%	3.8%
Greece	0.1	0.1	0.1	0.1	0.1	0.1	†	†	†	-	†
Hungary	8.8	9.2	8.7	8.6	7.4	8.1	8.2	8.9	9.9	+11.3%	0.5%
Iceland	-	-	-	-	-	-	-	-	-	-	-
Republic of Ireland	**1.7**	**1.9**	**1.9**	**1.9**	**1.9**	**2.2**	**2.2**	**2.3**	**2.7**	**+16.5%**	**0.1%**
Italy	34.1	36.9	39.1	41.5	41.2	42.3	40.8	44.9	46.9	+4.6%	2.4%
Netherlands	30.6	31.3	31.0	34.2	33.0	34.1	33.2	34.0	37.5	+10.3%	1.9%
Norway	-	-	-	-	-	-	†	†	†	100.0%	†
Poland	9.7	9.5	8.9	7.9	7.8	8.1	8.2	8.9	9.5	+7.2%	0.5%
Portugal	-	-	-	-	-	-	-	-	-	-	-
Romania	32.0	31.9	27.7	22.3	22.8	22.7	21.8	21.6	22.3	+3.4%	1.1%
Slovakia	3.9	4.2	4.8	4.6	4.2	4.1	4.2	4.3	4.6	+6.5%	0.2%
Spain	3.5	4.5	5.0	5.5	5.9	5.8	6.5	7.5	8.4	+12.0%	0.4%
Sweden	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	+6.8%	†
Switzerland	1.1	1.3	1.3	1.5	1.9	2.0	2.0	2.2	2.2	-0.1%	0.1%
Turkey	1.0	2.7	3.0	4.0	4.1	4.5	5.9	6.2	8.1	+31.7%	0.4%
United Kingdom	46.4	45.8	47.4	51.1	51.4	58.1	60.6	65.4	76.7	+17.3%	3.9%
Other Europe	6.0	6.2	5.5	5.4	5.2	4.7	4.7	4.4	6.9	+57.5%	0.4%
Total Europe	**280.4**	**291.5**	**293.8**	**301.4**	**300.2**	**315.3**	**317.4**	**340.3**	**376.4**	**+10.7%**	**19.1%**
Azerbaijan	13.3	13.9	14.2	13.6	10.6	7.8	7.3	7.2	7.2	-0.3%	0.4%
Belarus	11.1	11.7	12.4	13.0	15.1	14.0	12.3	11.1	11.6	+4.7%	0.6%
Kazakhstan	10.2	10.6	11.3	11.8	12.2	11.7	9.2	9.7	9.5	-2.5%	0.5%
Russian Federation	367.1	372.5	378.1	388.0	375.5	360.7	335.0	317.9	317.0	-0.3%	16.1%
Turkmenistan	12.7	13.1	8.8	8.6	8.4	8.4	9.2	7.2	7.6	+5.3%	0.4%
Ukraine	92.4	93.4	115.0	109.3	93.2	83.6	73.2	68.6	70.4	+2.6%	3.6%
Uzbekistan	29.5	31.1	33.2	33.4	33.6	36.6	37.2	38.1	40.0	+4.9%	2.0%
Other Former Soviet Union	22.4	24.1	23.5	21.2	16.8	11.5	10.2	10.3	10.3	+0.1%	0.5%
Total Former Soviet Union	**558.7**	**570.4**	**596.5**	**598.9**	**565.4**	**534.3**	**493.6**	**470.1**	**473.6**	**+10.7%**	**24.1%**
Iran	18.0	20.0	20.4	20.5	22.5	23.9	28.6	31.5	34.3	+8.9%	1.7%
Saudi Arabia	26.2	26.8	27.5	28.8	30.6	32.3	33.9	34.4	37.2	+8.0%	1.9%
United Arab Emirates	12.8	15.5	15.2	16.3	16.9	17.6	19.5	21.0	25.0	+19.3%	1.3%
Other Middle East	24.2	26.9	22.0	17.7	25.7	28.7	30.9	31.6	31.8	+0.6%	1.6%
Total Middle East	**81.2**	**89.2**	**85.1**	**85.3**	**95.7**	**102.5**	**112.9**	**118.5**	**128.3**	**+8.2%**	**6.5%**
Algeria	13.7	13.3	14.5	15.3	16.0	16.7	17.6	20.6	22.1	+7.4%	1.1%
Egypt	5.3	5.9	6.1	6.9	7.5	8.7	9.4	9.9	10.3	+4.1%	0.5%
South Africa	-	-	-	-	-	-	-	-	-	-	-
Other Africa	8.4	10.1	9.5	9.0	9.5	9.5	10.2	10.2	10.7	+4.3%	0.5%
Total Africa	**27.4**	**29.3**	**30.1**	**31.2**	**33.0**	**34.9**	**37.2**	**40.7**	**43.1**	**+5.8%**	**2.1%**
Australia	14.3	15.7	16.5	15.3	15.2	15.7	17.5	17.6	17.2	-2.1%	0.9%
Bangladesh	3.9	4.1	4.3	4.6	5.1	5.5	6.0	6.6	6.8	+1.9%	0.3%
China	12.7	12.9	13.2	13.4	13.6	14.6	14.9	15.9	15.9	-	0.8%
India	6.6	9.6	11.2	12.7	14.3	14.7	15.7	17.7	19.5	+10.4%	1.0%
Indonesia	12.5	16.5	18.0	19.5	20.3	21.5	24.6	27.5	27.1	-1.4%	1.4%
Japan	40.3	43.1	46.1	49.2	50.4	50.7	54.3	55.0	59.5	+8.1%	3.0%
Malaysia	5.6	6.7	6.8	8.1	9.5	11.7	12.3	13.0	14.5	+11.8%	0.7%
New Zealand	3.7	3.9	3.9	4.2	4.4	4.3	4.0	3.8	4.2	+12.0%	0 .2%
Pakistan	8.8	9.6	10.4	10.6	10.9	11.6	12.3	12.6	13.7	+8.1%	0.7%
Philippines	-	-	-	-	-	-	†	†	†	+66.7%	†
Singapore	-	-	-	-	1.0	1.4	1.4	1.4	1.4	-	0.1%
South Korea	2.7	2.6	3.0	3.5	4.6	5.7	7.6	9.2	12.2	+32.1%	0.6%
Taiwan	1.0	1.0	1.7	2.7	2.8	2.7	3.6	3.9	4.0	+4.4%	0.2%
Thailand	4.7	4.9	4.9	6.3	6.8	7.6	8.6	9.0	10.1	+11.8%	0.5%
Other Asia Pacific	2.6	2.4	2.4	2.3	2.4	2.8	2.9	3.1	4.9	+59.0%	0.3%
Total Asia Pacific	**119.4**	**133.0**	**142.4**	**152.4**	**161.3**	**170.5**	**185.7**	**196.3**	**211.0**	**+7.5%**	**10.7%**
TOTAL WORLD	**1660.3**	**1734.7**	**1767.5**	**1799.6**	**1803.6**	**1828.0**	**1834.9**	**1883.8**	**1971.6**	**+4.7%**	**100.0%**
of which OECD	817.4	858.5	866.9	893.0	911.8	947.0	969.6	1013.6	1063.6	+5.0%	53.9%
European Union 15	208.5	216.8	224.2	237.7	238.1	252.5	253.7	273.9	301.8	+10.3%	15.3%
Other EMEs@	218.9	239.8	243.8	254.9	275.6	295.8	321.3	348.0	377.0	+8.4%	19.1%

†Less than 0.05.
@ Excludes Central Europe and Former Soviet Union

XIV.6 PRODUCTIVITY OF PRODUCING WELLS IN OPEC MEMBER COUNTRIES-1996
(AS AT YEAR END)

Country	Average Depth (F eet)	Wells			AV-Daily Production (000'bbl)	t/w/d
		Flowing	Artificial Lift	Total		
1	2	3	4	5	6	7
Algeria	9131	868	321	1189	806	92
Divided Zone	7488	257	211	468	N.A.	N.A.
Indonesia	3700	580	7763	8343	1327	22
I.R. Iran	7086	1092	-	1092	3596	449
Iraq	N.A.	N.A.	N.A.	N.A.	740	N.A.
Kuwait	10,002	798	-	798	2006	343
SP. Libyan A.J.	7297	945	509	1454	1394	131
Nigeria	10314	1404	389	1793	1863	142
Qatar	7617	253	35	288	393	186
Saudi Arabia	8395	1320	100	1420	8102	778
U.A.E.	10,900	1045	382	1427	2161	207
Venezuela	5593	1185	13233	14418	2381	23
Total OPEC	6070	9747	22943	32690	24769	103
Total World	5351	54362	728760	783122	61619	11

t/w/d = Tonne/well/Day.
N.A. = Not Available.
- = Nil or negligible
Source = OPEC Annual Statistical Bulletin 1996.

XIV.7 WORLD OIL REFINING CAPACITIES AT END 1988TO 1996

(Million Tonnes Per Annum)

Country/Area %change	1988	1989	1990	1991	1992	1993	1994	1995	1996	%change 1996 over 1995	of Total 1996
1	2	3	4	5	6	7	8	9	10	11	12
Mexico	75	83	83	76	76	75	76	75	75	-	1.9
USA	779	773	778	779	753	746	768	759	767	1.1	19.8
Canada	92	92	93	95	97	92	88	88	88	(-)0.2	2.3
Total North America	**950**	**948**	**955**	**950**	**926**	**914**	**934**	**922**	**930**	**0.9**	**24.0**
Argentina	34	34	34	34	35	35	33	33	34	0.6	0.9
Brazil	66	68	68	68	69	74	76	76	76	-	2.0
Netherlands Antilles	16	16	16	23	23	24	24	24	24	-	0.6
Trinidad	15	15	12	12	12	13	13	13	13	-	0.3
Venezuela	60	58	61	61	61	59	59	64	64	-	1.6
Other S. Cent. America	95	101	103	99	101	102	100	106	106	-	2.8
Total S. & Cent. America	**286**	**291**	**294**	**298**	**302**	**306**	**306**	**316**	**316**	**-**	**8.2**
Belgium	35	35	35	35	34	34	34	34	34	-	0.9
France	90	84	84	84	85	84	84	86	87	1.2	2.2
Germany	108	100	101	110	111	112	113	104	104	-	2.7
Italy	117	116	114	114	119	111	118	117	117	-	3.0
Netherlands	69	63	62	62	62	62	62	62	62	-	1.6
Spain	62	62	62	62	62	62	62	62	62	-	1.6
United Kingdom	91	91	92	92	92	92	92	92	92	-	2.4
Other Western Europe	142	142	143	143	143	147	260	263	257	(-)2.3	6.6
Total Western Europe	**714**	**693**	**693**	**703**	**708**	**705**	**835**	**820**	**815**	**(-)0.5**	**21.1**
Former Soviet Union	610	611	611	611	504	502	510	513	513	-	13.3
Behrain	12	12	12	12	12	12	12	12	12	-	0.3
Iran	26	26	36	36	49	52	53	58	58	-	1.5
Iraq	16	16	16	16	16	20	26	26	26	-	0.7
Kuwait	41	41	41	8	17	28	37	37	37	-	1.0
Saudi Arabia	68	74	92	93	93	80	85	85	85	-	2.2
Other Middle East	52	52	52	51	53	53	51	55	55	-	1.4
Total Middle East	216	221	249	216	240	246	265	274	274	-	7.1
Total Africa	**140**	**139**	**142**	**142**	**138**	**140**	**142**	**143**	**143**	**-**	**3.7**
China	116	123	143	143	151	166	177	199	210	5.3	5.4
Indonesia	37	37	37	39	40	39	39	44	44	-	1.2
Japan	217	208	218	229	235	239	241	241	248	2.5	6.4
Singapore	46	50	53	54	55	58	58	63	90	(-)2.2	1.6
Of which India*	48.7	51.8	51.8	51.8	51.8	52.75	53.4	56.4	60.4	7.1	1.4
Other Asia Pacific	68	75	76	83	85	89	96	107	120	12.1	3.1
Australasia	37	37	36	36	37	38	38	39	40	2.7	1.0
South Korea	38	37	37	46	65	75	76	81	90	11.0	2.3
Total Asia Pacific	**612**	**622**	**656**	**686**	**723**	**756**	**779**	**832**	**874**	**5.0**	**3.1**
Total World	**3657**	**3657**	**3749**	**3753**	**3681**	**3705**	**3771**	**3819**	**3866**	**1.3**	**100.0**

* As on 1st April each year (P)=Provisional.
Source: BP Statistical Review of World Energy 1997.

XIV.8 WORLD REFINERY CRUDETHROUGHPUT 1986TO 1996

(Million Tonnes Per Annum)

Country/Area	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	% change 1996 over 1995	% share of Total 1996
1	2	3	4	5	6	7	8	9	10	11	12	13	14
U.S.A.	631	638	659	665	666	660	667	676	690	694	704	1.4	21.9
Canada	69	71	76	77	79	76	74	77	78	75	79	5.3	2.4
Mexico	65	67	68	71	74	75	74	76	71	73	74	1.4	2.3
S. & Cent. America	214	219	231	236	238	232	236	240	245	238	243	2.1	7.5
Europe	621	619	633	677	675	685	694	706	713	714	726	1.7	22.5
Middle East	187	195	212	216	215	189	215	240	245	264	267	1.1	8.3
Africa	95	99	104	108	117	117	117	116	113	117	121	3.4	3.8
Australasia	29	32	34	35	35	37	37	37	39	39	42	7.7	1.3
China	93	97	101	105	107	113	122	128	127	135	149	10.4	4.6
Japan	148	144	149	158	171	181	193	198	207	207	208	0.5	6.4
Other Asia Pacific	139	138	158	169	181	200	221	236	314	338	375	10.9	11.6
Former Soviet Union	481	484	479	475	457	439	356	295	253	243	233	(-)4.2	7.2
Total World	2844	2873	2985	3071	3094	3065	3073	3086	3095	3139	3220	2.6	100.0
of which: OECD	1464	1469	1520	1582	1616	1652	1688	1712	1743	1745	1776	1.8	55.1
EMCs*	783	806	864	895	920	912	975	1023	1044	1092	1155	5.8	35.9

Source : BP Statistical Review of World Energy, 1997.

XIV.9 COUNTRY-WISEWORLD OIL CONSUMPTION* 1988-1996

(Million tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Change 1996 over 1995	1996 share of total
USA	796.7	795.3	781.8	765.6	782.2	789.3	809.8	807.7	833.0	+3.1%	25.2%
Canada	76.8	80.3	77.7	74.8	74.9	77.0	78.7	76.3	79.5	+4.1%	2.4%
Mexico	60.6	64.9	67.7	70.4	71.2	71.0	77.9	71.4	73.8	+3.3%	2.2%
Total North America	**934.1**	**940.5**	**927.2**	**910.8**	**928.3**	**937.3**	**966.4**	**955.4**	**986.3**	**+3.2%**	**29.8%**
Argentina	21.8	19.8	18.5	19.3	19.6	19.5	20.0	20.1	21.1	+4.9%	0.6%
Brazil	58.9	59.5	58.4	59.0	62.1	62.9	65.7	69.2	74.2	+7.1%	2.2%
Chile	5.4	6.2	6.5	6.8	7.4	8.0	8.8	9.7	10.5	+8.6%	0.3%
Colombia	9.0	8.9	9.5	9.6	10.6	11.0	11.4	12.1	12.6	+3.7%	0.4%
Venezuela	18.9	17.9	18.4	18.6	19.7	19.4	19.6	20.0	18.9	-5.3%	0.6%
Other S. & Cent America	52.5	55.5	55.4	55.5	56.8	58.4	61.6	63.9	66.4	+4.0%	2.0%
Total S. & Cent. America	**166.5**	**167.8**	**166.7**	**168.8**	**176.2**	**179.2**	**187.1**	**195.0**	**203.7**	**+4.4%**	**6.1%**
Austria	10.6	10.4	10.8	11.6	11.3	11.4	11.3	11.3	11.4	+1.6%	0.3%
Begium & Luxembourg	24.4	24.4	24.8	26.5	27.1	26.5	27.0	26.4	28.7	+8.6%	0.9%
Bulgaria	11.1	10.8	8.8	5.9	5.4	5.6	5.8	6.2	6.7	+7.7%	0.2%
Czech Republic	9.9	9.4	8.4	7.1	6.8	6.9	6.7	7.4	7.5	+1.6%	0.2%
Denmark	9.5	9.2	9.0	9.1	9.0	9.5	10.1	10.5	11.4	+8.7%	0.3%
Finland	11.0	11.0	11.0	10.6	10.3	9.9	10.4	9.9	10.3	+3.4%	0.3%
France	86.0	88.4	89.4	94.6	94.4	91.1	88.2	89.0	91.0	+2.1%	2.8%
Germany	129.4	121.6	127.3	133.1	134.3	136.3	135.1	135.1	137.4	+1.6%	4.2%
Greece	13.7	15.0	15.7	15.8	16.1	16.7	16.9	17.6	18.5	+4.8%	0.6%
Hungary	9.2	8.9	9.3	8.0	8.1	7.7	8.1	7.7	7.0	-8.0%	0.2%
Iceland	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.8	0.8	+2.5%	†
Republic of Ireland	3.8	4.0	4.4	4.9	5.1	5.1	5.6	5.7	5.9	+3.4%	0.2%
Italy	91.7	93.8	93.6	92.4	93.5	92.1	92.3	94.9	94.1	-0.8%	2.8%
Netherlands	34.5	33.9	35.0	35.8	36.5	36.4	36.4	38.0	37.4	-1.6%	1.1%
Norway	9.2	9.0	9.2	8.7	9.0	9.5	9.6	9.6	10.5	+8.9%	0.3%
Poland	17.5	17.3	15.8	14.9	13.6	14.0	14.8	15.3	16.9	+10.2%	0.5%
Portugal	8.7	11.3	11.1	11.5	12.8	12.0	12.0	12.9	12.1	-6.3%	+0.4%
Romania	16.6	17.2	18.7	15.6	12.7	12.1	11.2	13.5	13.9	+2.7%	0.4%
Slovakia	5.7	5.3	4.7	4.1	3.9	4.0	3.6	3.8	3.8	+0.7%	0.1%
Spain	45.8	48.1	48.7	49.4	52.8	51.3	53.5	56.3	58.7	+4.2%	1.8%
Sweden	16.3	16.5	16.4	15.5	16.4	16.1	17.0	16.1	17.4	+8.3%	0.5%
Switzerland	12.4	11.9	12.8	13.0	13.1	12.3	12.7	11.8	12.2	+3.5%	0.4%
Turkey	22.3	20.8	22.1	22.1	23.5	27.0	25.8	28.4	28.8	+1.4%	0.9%
United Kingdom	80.0	81.7	82.9	82.7	83.7	84.1	83.4	81.7	83.7	+2.5%	2.5%
Other Europe	20.2	19.4	19.5	16.9	12.3	13.4	12.9	13.9	14.0	+0.6%	0.4%
Total Europe	**700.1**	**700.0**	**710.0**	**710.4**	**712.4**	**711.7**	**711.1**	**723.8**	**740.1**	**+2.2%**	**22.3%**
Azerbaijan	8.3	8.1	8.5	8.2	8.1	8.2	8.1	8.5	8.5	-	0.3%
Belarus	28.6	26.8	24.8	24.0	21.2	14.0	12.8	12.3	12.3	+0.1%	0.4%
Kazakhstan	18.2	18.6	21.5	21.7	20.3	15.7	12.3	12.0	11.3	-6.1%	0.3%
Russian Federation	248.0	252.8	249.7	243.4	224.4	188.6	162.7	146.1	128.0	-12.4%	3.9%
Turkmenistan	3.5	3.5	4.4	5.0	4.9	3.2	3.7	3.9	3.9	+0.3%	0.1%
Ukraine	60.6	58.0	63.0	57.5	42.6	24.8	19.8	18.9	17.3	-8.5%	0.5%
Uzbekistan	13.7	13.1	12.6	11.0	9.1	8.1	7.2	6.7	6.6	-2.1%	0.2%
Other Former Soviet Union	33.7	32.5	33.8	27.4	17.0	14.4	9.5	8.5	8.6	+1.2%	0.3%
Total Former Soviet Union	**414.6**	**413.4**	**418.3**	**398.2**	**347.6**	**277.0**	**236.1**	**216.9**	**196.5**	**-9.4%**	**6.0%**
Iran	38.2	43.7	47.1	49.0	50.0	51.8	54.3	59.4	57.1	-3.9%	1.7%
Saudi Arabia	49.3	48.7	51.2	55.4	51.4	52.1	53.5	51.4	53.4	+3.7%	1.6%
United Arab Emirates	11.5	11.7	12.7	16.5	16.9	17.2	17.0	17.1	17.2	+0.8%	0.5%
Other Middle East	51.5	52.3	53.5	48.3	53.9	55.2	57.9	61.1	62.8	+2.8%	1.9%
Total Middle East	**150.5**	**156.4**	**164.5**	**169.2**	**172.2**	**176.3**	**182.7**	**189.0**	**190.5**	**+0.7%**	**5.7%**
Algeria	8.2	8.6	8.3	8.9	8.8	9.8	9.5	9.4	9.4	-	0.3%
Egypt	22.0	22.9	23.8	23.4	22.7	21.6	21.5	23.3	24.6	+5.6%	0.7%
South Africa	15.9	16.5	16.6	16.7	17.3	18.0	18.8	20.1	20.6	+2.6%	0.6%
Other Africa	42.0	43.7	45.4	46.4	48.5	50.1	52.1	53.6	55.7	+3.9%	1.7%
Total Africa	**88.1**	**91.7**	**94.1**	**95.4**	**97.3**	**99.5**	**101.9**	**106.4**	**110.3**	**+3.7%**	**3.3%**
Australia	29.9	31.1	31.6	30.8	30.9	32.7	34.0	35.3	35.7	+1.1%	1.1%
Bangladesh	1.8	2.0	2.1	1.7	1.8	2.1	2.2	2.3	2.4	+3.9%	0.1%
China	110.2	112.3	110.3	117.9	129.0	140.5	149.6	160.7	172.5	+7.3%	5.2%
India	51.5	55.8	57.9	58.9	62.1	62.7	67.4	73.0	78.7	+7.9%	2.4%
Indonesia	25.2	26.9	31.0	32.4	35.2	37.7	37.0	39.2	42.9	+9.4%	1.3%
Japan	224.7	232.9	247.7	252.1	258.5	252.7	268.4	268.6	269.9	+0.5%	8.1%
Malaysia	10.1	10.9	13.0	13.9	14.0	15.6	17.4	17.9	18.5	+3.4%	0.6%
New Zealand	4.4	4.5	4.8	5.1	5.0	5.2	5.4	5.7	5.8	+2.5%	0.2%
Pakistan	9.6	10.3	10.7	11.4	12.4	13.5	14.5	15.1	17.1	+13.6%	0.5%
Philippines	9.8	11.0	11.5	11.1	13.7	14.1	14.9	16.8	17.5	+4.4%	0.5%
Singapore	16.5	18.9	19.5	19.9	21.0	22.3	26.0	27.0	26.7	-1.1%	0.8%
South Korea	35.6	41.0	49.5	59.9	72.3	79.3	87.0	94.8	101.4	+6.9%	3.1%
Taiwan	23.6	26.1	26.9	27.8	28.6	30.5	32.4	35.4	35.3	-0.3%	1.1%
Thailand	14.5	17.0	19.6	21.4	23.6	26.8	29.8	34.8	38.0	+9.4%	1.1%
Other Asia Pacific	15.9	16.1	17.1	16.5	18.8	19.6	20.5	21.5	23.0	+7.1%	0.7%
Total Asia Pacific	**583.3**	**616.8**	**653.2**	**680.8**	**726.9**	**755.3**	**806.5**	**848.1**	**885.4**	**+4.4%**	**26.8%**
Total World	**3037.2**	**3086.6**	**3134.0**	**3133.6**	**3160.9**	**3136.3**	**3191.8**	**3234.6**	**3312.8**	**+2.4%**	**100.0%**
Of which OECD	1812.9	1830.1	1844.5	1843.8	1879.1	1882.8	1928.9	1928.4	1975.5	+2.4%	59.6%
European Union 15	565.4	569.3	580.1	593.5	603.3	598.5	599.2	605.4	618.0	+2.0%	18.7%
Other EMEs@	729.5	764.1	794.4	826.2	878.3	919.5	970.3	1028.8	1078.4	+4.8%	32.6%

†Less than 0.05.
@ Excludes Central Europe and Former Soviet Union
*Inland demand plus international aviation and marine bunkers and refinery fuel and loss.

XIV. PRODUCT-WISE REGIONAL CONSUMPTION OF MAIN PETROLEUM PRODUCTS DURING 1988-1996

(Million tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Change 1996 over 1995	1996 share of total
USA											
Gasolines	333.8	335.6	329.5	324.2	331.2	335.5	339.3	345.5	350.4	+1.4%	42.1%
Middle distillates	229.7	231.7	230.5	225.3	228.9	234.7	246.3	248.6	259.1	+4.2%	31.1%
Fuel Oil	76.0	75.0	67.2	63.0	59.4	58.3	55.1	45.8	45.3	-1.1%	5.4%
Others	157.2	153.1	154.6	153.1	162.7	160.8	169.1	167.8	178.2	+6.2%	21.4%
Total USA	**796.7**	**795.4**	**781.8**	**765.6**	**782.2**	**789.3**	**809.8**	**807.7**	**833.0**	**+3.1%**	**100.0%**
Canada											
Gasolines	28.3	28.7	28.4	27.4	23.6	25.3	25.8	29.7	30.1	+ 1.5%	37.9%
Middle distillates	24.2	25.1	24.0	22.4	23.8	24.5	26.0	24.7	26.3	+ 6.5%	33.1%
Fuel Oil	7.7	9.4	8.7	7.7	8.3	7.5	6.8	6.0	5.7	-5.0%	7.2%
Others	16.5	17.1	16.6	17.3	19.1	19.7	20.1	15.9	17.3	+ 9.0%	21.8%
Total Canada	**76.7**	**80.3**	**77.7**	**74.8**	**74.8**	**77.0**	**78.7**	**76.3**	**79.4**	**+ 4.1%**	**100.0%**
Mexico											
Gasolines	17.2	19.3	20.6	22.0	22.0	22.3	23.3	22.3	22.4	+ 0.5%	30.4%
Middle distillates	11.2	11.6	12.3	13.0	13.8	14.0	15.3	14.1	14.8	+ 4.9%	20.1%
Fuel Oil	21.9	23.3	23.5	22.7	21.8	20.8	24.7	21.3	22.5	+ 5.6%	30.5%
Others	10.4	10.7	11.4	12.7	13.6	14.0	14.5	13.7	14.0	+ 2.7%	19.0%
Total Mexico	**60.7**	**64.9**	**67.8**	**70.4**	**71.2**	**71.1**	**77.8**	**71.4**	**73.7**	**+ 3.3%**	**100.0%**
OECD Europe											
Gasolines	156.5	158.7	165.1	165.0	166.9	164.7	163.5	164.5	165.9	+ 0.8%	24.5%
Middle distillates	246.4	244.7	250.4	261.1	263.3	266.7	267.5	273.8	287.9	+ 5.2%	42.5%
Fuel Oil	113.6	114.1	112.6	111.4	113.5	111.0	108.2	108.5	106.9	- 1.5%	15.8%
Others	103.1	103.5	105.0	107.5	112.8	112.4	115.6	116.6	117.0	+ 0.3%	17.2%
Total OECD Europe	**619.6**	**621.0**	**633.1**	**645.0**	**656.5**	**654.8**	**654.8**	**663.4**	**677.7**	**+2.1%**	**100.0%**
Japan											
Gasolines	46.7	49.4	51.0	52.8	55.9	56.4	60.1	64.5	65.8	+ 2.0%	24.4%
Middle distillates	76.8	79.2	83.1	86.5	88.4	89.6	92.1	95.3	98.2	+ 3.1%	36.4%
Fuel Oil	61.8	62.9	71.0	68.9	68.4	60.0	69.7	61.2	57.7	- 5.8%	21.4%
Others	39.4	41.3	42.6	43.9	45.9	46.7	46.4	47.5	48.1	+ 1.3%	17.8%
Total Japan	**224.7**	**232.8**	**247.7**	**252.1**	**258.6**	**252.7**	**268.3**	**268.5**	**269.8**	**+0.5%**	**100.0%**
Australasia											
Gasolines	14.0	14.5	14.7	14.6	14.8	14.9	15.2	15.4	15.5	+ 0.7%	37.4%
Middle distillates	12.1	12.6	12.9	13.0	13.2	14.3	14.9	15.7	16.7	+ 6.3%	40.2%
Fuel Oil	2.5	2.7	2.4	2.5	2.1	1.9	2.3	2.4	2.1	- 13.2%	5.0%
Others	5.7	5.8	6.4	5.8	5.8	6.9	7.1	7.5	7.2	- 3.6%	17.4%
Total Australasia	**34.3**	**35.6**	**36.4**	**35.9**	**35.9**	**38.0**	**39.5**	**41.0**	**41.5**	**+ 1.2%**	**100.0%**
Asian EMEs											
Gasolines	49.0	54.0	64.5	69.2	78.0	84.8	98.9	107.4	115.8	+ 7.8%	20.2%
Middle distillates	125.0	135.3	142.7	152.3	169.4	185.4	198.2	214.0	231.9	+ 8.3%	40.4%
Fuel Oil	103.2	111.5	111.8	117.8	126.1	132.9	137.1	145.7	148.8	+2.1%	25.9%
Others	47.2	47.3	50.4	53.4	59.1	61.3	64.5	71.3	77.6	+ 8.9%	13.5%
Total Asian EMEs	**324.4**	**348.1**	**369.4**	**392.7**	**432.6**	**464.4**	**498.7**	**538.4**	**574.1**	**+ 6.6%**	**100.0%**
Non-Asian EMEs											
Gasolines	79.9	83.2	86.0	87.9	91.0	94.1	101.2	106.2	109.0	+ 2.6%	21.4%
Middle distillates	143.6	147.1	151.9	154.2	158.7	163.8	173.6	184.2	187.9	+ 2.0%	37.0%
Fuel Oil	118.9	122.7	123.1	129.1	125.7	124.8	125.5	128.6	131.6	+ 2.4%	25.9%
Others	65.2	65.5	66.9	64.9	73.7	75.9	75.1	75.1	79.7	+6.0%	15.7%
Total Non-Asian EMEs*	**407.6**	**418.5**	**427.9**	**436.1**	**449.1**	**458.6**	**475.4**	**494.1**	**508.2**	**+ 2.9%**	**100.0%**
OECD & EMEs											
Gasolines	725.5	743.3	759.7	763.1	783.5	798.1	827.2	855.5	874.9	+ 2.3%	28.6%
Middle distillates	869.0	887.3	907.7	927.9	959.7	993.0	1033.9	1070.5	1122.8	+ 4.9%	36.7%
Fuel Oil	505.7	521.5	520.2	523.1	525.3	517.1	529.4	519.6	520.6	+0.2%	17.0%
Others	444.5	444.3	453.9	458.7	492.5	497.7	512.4	515.4	539.2	+ 4.6%	17.7%
Total OECD & EMEs	**2544.7**	**2596.4**	**2641.5**	**2672.8**	**2761.0**	**2805.9**	**2902.9**	**2961.0**	**3057.5**	**+3.3%**	**100.0%**

* Non-Asian EMEs excludes Central Europe and Former Soviet Union.

Note : 'Gasolines' consists of aviation and motor gasolines and light distillate feedstock (LDF)
'Middle Distiliates' consists of jet and heating kerosines, 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 and refinery fuel and loss.

XIV.11 WORLD OIL PRODUCTION, CONSUMPTION AND RELATIVE DEFICIT/SURPLUS IN EACH REGION/ COUNTRY DURING 1996 & 1990

(Million Tonnes)

Country/Region	1996				1990			
	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)	660.7	986.3	-325.6	-33.0	656.5	927.2	-270.7	-29.2
S. & Cent. America	313.9	203.7	110.2	54.1	229.8	166.7	63.1	37.8
Total Europe	328.1	740.1	-412.0	-55.7	217.5	710.0	-492.5	-69.4
Middle East	983.3	190.5	792.8	416.2	861.9	164.5	697.4	424.0
Africa	359.6	110.3	249.3	226.0	320.7	94.1	226.6	240.8
Asia Pacific	363.5	885.4	-521.9	-58.9	322.9	653.2	-330.3	-50.6
of which India	35.0	78.7	-43.7	55.5	34.8	57.9	23.1	-39.9
Japan	-	269.9	-269.9	-100.0	-	247.7	-247.7	-100.0
China	158.5	172.5	-14.0	8.1	138.3	110.3	28.0	25.4
Australia	27.0	35.7	-8.7	-24.4	28.4	31.6	-3.2	-10.1
OECD	1005.7	1844.5	-838.8	-45.5	889.4	1975.5	-1086.1	-55.0
Former Soviet Union	352.6	196.5	156.1	79.4	570.7	418.3	152.4	36.4
Total World:	3361.6	3312.8	48.8	1.5	3180.1	3134.0	46.1	1.5

(p)= provisional.
Source: B.P. Statistical Review of World Energy 1997

XIV.12 WORLD CRUDE OIL & PETROLEUM PRODUCTS IMPORTS/EXPORTS-1996

(Million Tonnes)

Country/Area	IMPORTS		EXPORTS	
	Crude	Products	Crude	Products
1	2	3	4	5
U.S.A.	373.6	92.0	4.9	42.2
Canada	34.1	6.8	55.8	17.6
Mexico	--	8.3	77.4	5.1
South & Central America	54.3	15.8	102.9	45.6
Western Europe	389.8	83.1	49.5	36.2
Former Soviet Union & Central Europe	19.6	12.6	76.6	55.9
Middle East	4.5	3.7	741.8	111.0
North Africa	7.1	5.2	104.6	31.7
West Africa	2.0	6.5	142.8	2.7
East & Southern Africa	22.4	4.0	--	--
Other Asia Pacific	259.6	94.4	49.3	49.6
Japan	226.1	55.5	--	6.2
Australasia	22.9	3.8	9.2	4.7
China	22.6	15.8	20.9	3.3
Unidentified*	10.0	23.0	12.9	18.7
Total World	1448.6	430.5	1448.6	430.5

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

Notes:

(i) Bunkers are not included as exports.

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

SOURCE: BP Statistical Review of World Energy, 1997.

XIV.13 EXPORTS OF CRUDE OIL AND REFINED PRODUCTS FROM OPEC MEMBER COUNTRIES

(Million Tonnes)

Country	1980	1985	1990	1991	1992	1993	1994	1995	1996
1	2	3	4	5	6	7	8	9	10
				CRUDE OIL					
Algeria	35.6	13.5*	13.9*	17.1	13.9r	15.3	16.4	16.6	19.5
Indonesia	49.2	35.0	34.0	39.7	32.6r	33.9r	39.5	37.0	35.2
Iran, IR	39.7	77.9*	110.2*	120.1*	126.2*	129.5*	132.0*	130.5*	131.0*
Iraq	123.5	53.9*	79.2*	2.1r	3.0*	2.9*	3.0*	3.2*	4.4*
Kuwait	64.5	23.6	32.0*	4.2*	34.7*	71.7	62.9	59.1	62.7
Libya	84.3	44.4*	54.1	60.6*	58.7*	55.3*	56.0*	54.9*	55.7*
Nigeria	97.6	66.2	76.9*	79.9*	78.9*	77.5	79.2*	82.9*	84.6
Qatar	23.2	13.9	17.3	16.7	18.1	17.0	16.1	16.6*	18.3*
Saudi Arabia	459.1	106.8	223.4r	324.0r	328.6r	313.4	310.4	313.2	304.2
U.A.E.	84.5	48.5*	94.1*	109.0*	102.9*	98.1*	97.3*	95.9	96.8
Venezuela	64.1	41.0	61.7	68.6r	71.4r	76.7r	84.5	90.6r	98.4
TOTAL	1138.2	542.4	817.2	864.6	881.9	906.1	897.2	900.5	910.7
				REFINED PETROLEUM PRODUCTS					
Algeria	7.4	15.9*	22.5*	19.9	20.9*	18.7	19.1	19.7	20.2
Indonesia	8.1	7.4	11.9	11.5	12.7	11.8r	12.4	14.6	14.8
Iran, IR	7.0	2.0*	3.0*	4.4*	3.5*	3.5*	4.5*	5.5*	4.5*
Iraq	1.7	0.6*	4.0*	-	0.8*	0.9*	1.0*	0.9*	1.0*
Kuwait	17.1	24.5	18.9*	2.0*	12.8*	20.9	31.0	39.5	35.7
Libya	3.6	4.5*	7.5*	7.0*	8.5*	7.1*	6.5*	6.1*	5.6*
Nigeria	3.7	1.0	1.5*	1.5	1.5*	1.6	1.2*	1.0*	1.1
Qatar	0.1	1.4*	3.7*	4.1	5.2	5.8	5.1*	4.9*	5.3*
Saudi Arabia	20.6	28.5	64.8r	60.9r	64.3r	69.0	67.7	65.8	74.3
U.A.E.	1.0	4.6*	8.2*	8.5*	8.6*	8.0*	7.7*	13.4	13.5
Venezuela	28.1	26.3	30.7	35.3	30.7r	31.6r	31.5	34.3r	36.9
Total	100.0	117.6	177.8	156.3	169.8	179.2	187.9	205.8	213.1

* Provisional or estimated figures, as of July 11, 1997.

r = Revised

Note: Ecuador and Gabon withdrew their membership of OPEC

Source OPEC Annual Statistical Bulletin 1996.

XIV.14 CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS

(Million Tonnes)

IMPORT REGION	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America	210.7	60.9	107.2*	124.4*	135.8	170.9*	190.9	189.6	176.5	189.8	187.6	183.1	185.4
Of which USA	188.0	56.3	99.9	118.6	130.3	162.6	181.0	179.6	172.2	182.0	177.0	171.3	174.0
Latin America	111.6	45.4*	40.9*	32.6*	37.3	33.6*	35.9*	33.7	43.0	38.9	40.4	33.6	40.0
Western Europe	453.1	223.3*	261.7*	218.6*	235.9	259.7*	272.7*	279.0	278.4	279.6	262.3	253.6	252.1
Of which:													
France	100.0	37.3	42.8	25.8	29.2	35.1	40.0	44.9	44.5	52.4	44.4	44.0	42.2
Germany	65.8	20.6	25.9	23.2	27.9	32.3	35.0	36.8	36.9	31.2	37.1	29.8	28.8
Italy	67.5	49.3	56.8	49.5	44.2	48.7	56.4	61.3	56.9	55.8	46.8	49.4	53.8
U.K.	34.5	10.5	12.7	9.1	11.9	10.2	14.7	14.2	13.5	17.3	11.5	10.1	9.2
Middle East	21.8	19.1*	21.1*	15.2*	13.9	14.1*	14.9*	14.2	15.4	14.8	15.6	15.1	15.6
Africa	16.2	8.2*	9.8*	11.0*	9.9	11.6*	14.7*	17.8	14.1	14.0	14.7	25.2	23.6
Asia and Far East	285.3	162.2*	167.3*	164.8*	193.1	224.4*	257.1*	299.6	331.3	346.3	358.7	369.9	371.3
Of which:													
Japan	176.2	114.4*	107.6	113.7	115.6	133.2	147.6	155.6	162.6	169.3	179.2	179.2	177.2
Oceania	10.6	2.3*	3.1*	5.7*	4.3	7.0	5.9	6.5	8.4	10.6	9.2	9.6	10.8
Eastern Europe	17.2	11.0*	21.9*	20.2	23.5	25.7*	16.5*	11.4	12.0	7.1	8.7	9.8	9.2
Unspecified	6.2	0.4	-	-	2.1	-	-	3.6	-	5.0	-	0.5	2.8
OECD	850.6	393.6	475.1	456.9	484.3	561.7	608.4	624.1	635.0	662.3	631.4	570.3	618.1
TOTAL WORLD	1132.7	532.8*	632.6*	592.5*	656.0*	747.0	808.7*	855.6*	879.1r	906.1*	897.2	900.5	910.7

r = Revised

Source = OPEC Annual Statistical Bulletin 1996.

Note: Figures Converted to million tonnes using conversion factor: 1 barrel = 0.136 Metric tonnes

* = provisional or estimated figures, as of July 11,1997.

- = Nil or Negligible.

XIV.15 OPEC MEMBER COUNTRIES' CRUDE OIL EXPORTS BY DESTINATION 1996

(ooo' bbl/Day)

DESTINATION/COUNTRY	Algeria	Indonesia	Iran	Iraq	Kuwait	Libya	Nigeria	Qatar	Saudi Arabia	UAE	Venezuela
1	2	3	4	5	6	7	8	9	10	11	12
North America	63.8	57.3	39.5	1.2	205.6	-	799.1	-	1340.6	1.4	1214.2
Latin America	2.7	-	60.0	-	-	-	65.0	5.0	128.8	-	541.8
Eastern Europe	10.3	-	155.0	8.6	-	10.0	-	-	-	-	-
Western Europe	310.6	-	1145.5	11.0	210.7	1074.0	697.0	1.6	1449.8	0.7	161.7
Middle East	-	-	20.0	64.0	-	-	-	-	228.4	-	-
Africa	3.4	-	190.0	-	82.9	20.0	40.0	-	96.3	40.9	-
Asia and Far East	-	566.0	1020.0	3.3	739.6	15.0	91.2	345.0	2818.3	1843.6	13.7
Oceania	-	83.4	-	-	8.4	-	6.7	15.4	47.1	56.6	-
Unspecified	-	-	-	-	11.2	-	-	-	-	-	45.0
OECD	374.4	371.5	1533.0	15.5	772.0	1063.0	1523.0	310.4	3819.0	1253.8	1376.4
Total World	**390.8**	**706.8**	**2630.0**	**88.1**	**1258.4**	**1119.0**	**1699.0**	**367.0**	**6109.3**	**1943.2**	**1976.4**

Source: OPEC Annual Statistical Bulletin 1996.

XIV.16 OPEC MEMBER COUNTRIES' VALUES OF PETROLEUM EXPORTS, a) 1990-1996
(Million US Dollars)

	1990	1991	1992	1993	1994	1995	1996
Algeria	9,588	8,464	7,885	6,902	6,335	6,938r	9,164*
Indonesia	7,404	6,714	6,619	5,693	6,005	6,443r	7,243
I.R. Iran	17,906	15,767	16,802	14,251	14,801	14,944	17,660*
Iraq	9,594*	351*	482*	425*	421*	461*	680*
Kuwait	6,385	874	6,224	9,708	10,482	12,054	14,099
S.P. Libyan A.J.	10,715	10,211	9,326	7,689**	7,170*	7,763*	9,543*
Nigeria	13,265	11,792	11,642	10,859*r	11,040*	11,512*r	14,888*
Qatar	3,273*	2,828*	2,870*	2,811*	2,623*	2,987*	3,801*
Saudi Arabia	40,130	43,701	44,754	38,621	38,139r	42,501*	50,046*
United Arab Emirates	14,846	14,356	14,251*	12,118*	11,683*	12,822*r	14,980*
Venezuela	13,953	12,302	11,208	11,030r	11,473r	13,739r	18,520
Total OPEC	**147,058**	**127,360**	**132,063**	**120,107**	**120,172**	**132,164**	**160,624**

a) Where applicable, petroleum product exports are included. Data for some countries may include exports of condensates and other NGLs.

Notes: Totals may not add up, due to independent rounding. Revisions have been made throughout the time-series.

Source: OPEC Annual Statistical Bulletin 1996.

r = Revised;

* = Provisional or estimated figures, as of July 11, 1997.

XIV.17 LOAN ASSISTANCE FROM OPEC AND OTHER OIL SUPPLYING NATIONS 1986-87TO 1996-97

(Rs. Crores)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
	1	2	3	4	5	6	7	8	9	10	11
U.S.S.R.:											
Authorisation	2055.5	1162.7	6210.0	2212.6	--	--	--	--	--	--	--
Utilisation	175.5	222.1	207.2	218.4	295.3	137.4	34.8	-(0.6)	--	--	--
OPEC											
Abu Dhabi Fund:											
Authorisation	--	--	--	--	--	--	--	--	--	--	--
Utilisation	--	--	--	--	--	--	--	--	--	--	--
OPEC Fund Loans											
Authorisation	9.0	10.4	14.6	--	11.6	--	--	--	--	--	--
Utilisation	7.4	24.5	29.0	6.9	9.8	18.1	10.1	5.3	2.0	--	2.4
U.A.E. Loans:											
Authorisation	--	--	--	--	--	--	--	--	--	--	--
Utilisation	--	--	--	--	--	--	--	--	--	--	--
Saudi Arab Fund:											
for Devep.											
Authorisation	--	50.2	--	--	--	--	--	--	--	--	--
Utilisation	7.4	0.9	5.6	42.6	29.7	26.5	2.2	5.2	1.3	--	26.0
Kuwait Fund for											
Arab Economic Develop.											
Authorisation	--	--	36.1	--	--	--	--	--	--	--	--
Utilisation	23.0	10.8	1.8	1.5	1.3	--	5.6	8.8	3.9	16.9	22.2
Iraq-Loans:											
Authorisation	--	--	--	--	--	--	--	--	--	--	--
Utilisation	--	--	--	--	--	--	--	--	--	--	--
Iran-Loans:											
Authorisation	--	--	--	--	--	--	--	--	--	--	--
Utilisation	--	--	--	--	--	--	--	--	--	--	--
TOTAL OPEC ASSISTANCE:											
Authorisation	9.0	60.6	50.7	--	11.6	--	--	--	--	--	--
Utilisation	37.8	36.2	36.4	51.0	40.8	44.6	17.9	14.0	5.2	16.9	48.2

Note: 1. Figures of authorisation of assistance include agreements signed on Government and non-Government assistance.
2. Utilization of assistance is on Government and non-Government accounts.
3. Utilization figures are exclusive of suppliers credit and commercial borrowings.

SOURCE: Economic Survey, 1997-98.

--: Nil.

XIV.18 SPOT PRICES OF KEY OPEC CRUDE SINCE 1987

(US $/bbl)

Period		Country/Crude Name													
		Kuwait	S.P.Libyan	Nigeria	Qatar	Saudi Arabia		UAE	Venezuela	Indonesia	I.R. Iran		Iraq		Oman
		Kuwait Exp. 31.4/2.6	A.I. Brega 40.4/0.2	Forcados 29.5/0.21	Dukhan 41.4/1.1	Arab Medium 30.3/2.4	Arab Heavy 28.0/3.0	Murban 39.4/0.8	T.J. Medium 24.0/.85	Attaka 42.3/0.09	Iran Light 33.9/1.4	Iran Heavy 31.0/1.6	Basrah 34.0/2.0	Kirkuk 36.1/2.1	Oman 36.3/0.79
1987		16.48	18.08	18.40	17.40	16.57	16.10	17.54	16.42	18.46	17.03	16.57	16.90	17.23	17.25
1988		12.61	14.72	15.00	13.63	12.71	12.13	13.92	12.90	15.40	13.26	12.85	13.66	13.79	13.53
1989		15.23	18.21	18.29	16.18	15.39	14.93	16.61	15.85	18.54	16.04	15.54	16.33	16.90	16.07
1990		-	23.82	23.74	21.22	19.50	18.77	21.70	18.58	23.73	20.64	19.91	-	-	20.89
1991		-	20.41	20.17	17.86	15.77	14.02	18.17	15.71	20.68	17.34	16.33	-	-	17.14
1992		-	19.54	19.61	18.59	16.41	15.22	18.86	16.03	20..51	17.77	16.72	-	-	17.72
1993		14.07	17.08	17.44	16.21	14.19	13.03	16.90	14.33	18.13	15.06	14.08	-	-	15.77
1994		14.14	15.91	16.22	15.85	14.43	13.67	16.23	14.32	16.46	14.87	14.59	-	-	15.12
1995		15.89	17.21	17.26	16.72	16.08	15.57	17.17	15.91	17.83	16.16	16.25	-	-	16-34
	Jan.	11.88	14.20	14.69	14.14	12.23	11.18	14.78	11.55	15.46	13.09	12.25	NA	NA	13.39
	Feb.	11.71	14.03	14.43	14.06	12.06	11.01	14.63	12.03	15.61	13.01	11.97	NA	NA	13.31
	Mar.	11.68	14.03	14.43	13.65	11.79	10.99	14.14	11.76	14.70	12.58	11.84	NA	NA	12.78
	Apr.	13.07	15.21	15.26	14.91	13.07	12.27	15.33	13.41	15.00	13.66	13.43	NA	NA	13.90
	May	14.18	16.29	16.69	15.92	14.58	13.80	16.35	15.15	16.07	14.58	14.45	NA	NA	15.10
	June	15.12	16.83	17.33	16.70	15.47	14.80	17.15	15.81	17.04	15.89	15.77	NA	NA	15.95
	July	16.07	17.54	18.00	17.33	16.27	15.67	17.65	15.88	18.43	16.56	16.52	NA	NA	16.73
	Aug.	15.55	16.72	17.11	16.89	15.89	15.33	17.13	15.76	18.24	16.20	15.98	NA	NA	16.39
	Sep.	14.69	15.84	16.18	16.27	15.39	14.99	16.48	13.76	16.93	15.42	15.60	NA	NA	15.69
	Oct.	14.92	16.55	16.91	16.47	15.52	14.37	16.77	14.79	16.81	15.51	15.68	NA	NA	15.78
	Nov.	15.55	17.43	17.58	17.11	15.65	15.00	17.44	16.18	16.57	16.13	16.22	NA	NA	16.38
	Dec.	15.14	15.99	15.85	16.71	15.24	14.59	16.92	15.78	16.71	15.78	15.33	NA	NA	15.95
1995	Jan.	15.71	16.78	16.85	17.06	15.85	15.24	17.43	15.31	17.89	16.33	15.97	NA	NA	16.48
	Feb.	16.24	17.28	17.35	17.52	16.41	15.81	17.97	15.88	18.93	16.82	16.60	NA	NA	16.94
	Mar.	15.97	17.13	17.00	17.32	16.37	15.92	17.57	16.18	18.46	16.62	16.27	NA	NA	16.74
	Apr.	17.38	18.75	18.75	18.23	17.48	17.08	18.47	17.42	18.79	17.56	17.67	NA	NA	17.68
	May	17.15	18.54	18.58	17.95	17.35	16.93	18.30	17.58	18.86	17.22	17.58	NA	NA	17.47
	June	15.74	17.53	17.50	16.56	16.24	15.74	17.09	16.47	17.59	16.05	16.48	NA	NA	16.38
	July	15.02	15.93	15.93	15.40	15.12	14.62	15.85	15.15	16.49	14.89	15.32	NA	NA	15.30
	Aug.	15.30	16.14	16.24	15.67	15.31	14.61	16.19	15.45	16.90	15.34	15.59	NA	NA	15.49
	Sept.	15.35	16.93	17.05	16.04	15.60	15.00	16.42	15.18	17.01	15.61	15.74	NA	NA	15.73
	Oct.	14.74	16.45	16.50	15.46	14.96	14.38	15.95	14.69	16.83	15.01	15.10	NA	NA	15.14
	Nov.	15.50	17.06	17.16	16.22	15.60	15.15	16.85	14.89	17.49	15.69	15.80	NA	NA	15.84
	Dec.	16.81	18.25	18.43	17.45	16.91	16.61	18.22	16.66	19.01	16.97	17.15	NA	NA	17.04
1996	Jan.	16.51	18.32	18.55	17.33	16.59	16.24	18.00	17.01	20.30	16.92	16.68	NA	NA	16.99
	Feb.	15.96	18.25	18.64	16.95	16.54	16.19	17.57	17.01	20.00	16.51	16.00	NA	NA	16.58
	Mar.	16.79	20.29	20.61	17.73	18.30	17.95	18.50	18.88	20.30	17.26	17.02	NA	NA	17.33
	Apr.	17.56	21.22	21.34	18.39	19.92	19.37	19.07	21.27	20.22	18.11	17.50	NA	NA	18.23
	May	16.96	19.58	19.48	17.86	18.10	17.55	18.40	19.05	19.99	17.58	16.83	NA	NA	17.70
	June	17.08	18.71	18.48	17.89	17.12	16.72	18.95	18.07	20.04	17.51	17.16	NA	NA	17.63
	July	17.47	19.87	19.83	18.66	17.56	16.96	19.50	18.79	20.47	18.32	17.48	NA	NA	18.44
	Aug.	18.26	20.91	20.98	19.49	18.36	17.71	20.39	18.99	20.38	19.16	18.31	NA	NA	19.28
	Sep.	19.87	22.84	22.93	21.17	20.07	19.37	22.11	20.76	22.55	20.72	19.97	NA	NA	20.84
	Oct.	21.34	24.49	24.79	22.39	21.57	20.87	23.57	22.41	24.96	21.94	21.53	NA	NA	22.06
	Nov.	20.73	23.11	23.27	22.01	21.01	20.26	22.93	21.03	23.99	21.24	20.86	NA	NA	21.36
	Dec.	21.69	24.36	24.65	23.01	22.00	21.15	23.98	20.44	24.63	22.41	21.79	NA	NA	22.33

Notes: The number below crude names indicate the API gravities and sulphur content in weight percentage. T.J. Medium quotations are posted prices.
Source: OPEC Annual Statistical Bulletin 1996.

XIV.19 CRUDE OIL SPOT PRICES IN US DOLLARS/BBL
(Average unit value, FOB)

Crude	Country	1993	1994	1995	1996	1997
Brent	U.K.	17.00	15.81	17.03	20.66	19.12
WTI	U.S.A.	18.44	17.20	18.41	21.77	20.62
WTS	..	16.86	16.27	17.41	20.91	18.81
Louisiana Light	..	18.55	17.25	18.59	22.34	20.73
Arab Light	S. Arabia	..	..	..	..	..
Dubai	UAE	14.92	14.75	16.10	18.57	18.15
Iranian Light	Iran	15.38	15.13	16.35	20.04	17.78
Iranian heavy	Iran	14.48	14.74	15.94	19.40	17.32
Urals	Russia	15.39	15.23	16.62	20.81	18.33
Minas	Indonesia	17.89	16.20	17.63	20.63	19.30
Tapis	Malaysia	18.85	17.14	18.28	21.53	21.00

..: Not Available.
Source: Energy Prices and Taxes, Ist Quarter 1998, International Energy Agency Publication.

XIV.20 PETROLEUM PRODUCT SPOT PRICES IN US DOLLARS/BBL
(Average Unit value, FOB)

	1993	1994	1995	1996	1997
		NW EUROPE			
Gasoline	22.46	20.16	21.25	24.62	24.77
Gas oil	22.28	19.81	20.47	25.91	23.39
Jet/Kero	23.36	20.95	21.60	27.11	24.58
Naphtha	18.47	17.30	18.15	22.72	21.43
LSFO	13.50	14.00	15.76	17.56	15.47
HSFO	10.22	13.01	14.82	16.30	14.59
		U.S.A.			
Gasoline	21.58	20.53	22.58	25.99	25.22
Gasoil	22.03	20.69	20.73	25.80	23.51
Jet/Kero	23.31	22.21	21.76	27.41	24.58
Naphtha	..	..	..	..	..
LSFO	14.64	15.05	16.06	19.12	16.91
HSFO	11.21	12.24	14.47	15.97	15.26
		SINGAPORE			
Gasoline	24.02	21.08	20.83	23.81	24.57
Gasoil	24.02	20.88	21.60	27.01	24.28
Jet/Kero	24.42	21.75	22.72	28.29	24.97
Naphtha	17.23	16.35	17.54	20.36	21.92
LSFO	17.23	16.35	16.00	17.97	16.93
HSFO	10.81	12.37	14.30	15.91	15.10

.. = Not Available.
Source: Energy Prices and Taxes, Ist-Quarter, 1998, International Energy Agency Publications.

XIV.21 NATURAL GAS PRICES IN INDUSTRIAL/DEVELOPED COUNTRIES OF THE WORLD

US $ 10^7 K. Cal (GCV)

Country	1986	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
A. FOR INDUSTRIAL USE											
Australia	95.43	115.70	115.84	123.12	135.97	126.95	121.40	127.20	132.40	146.40	NA
Austria	201.11	166.61	142.25	176.43	188.69	183.83	169.39	172.00	194.50	194.70	NA
Belgium	154.98	114.63	113.96	144.37	159.16	144.48	129.30	124.30	141.50	132.60	131.30
Canada	97.70	92.21	83.42	83.69	87.03	83.70	74.66	78.50	69.80	71.10	72.50
Finland	136.53	116.14	118.92	146.78	140.25	129.53	92.10	107.50	145.90	148.70	143.70
France	157.15	133.54	129.58	155.16	151.30	152.78	142.80	141.80	161.00	161.90	NA
Germany	196.66	141.49	143.94	187.50	201.15	200.51	187.30	184.70	207.10	201.60	NA
Ireland	333.53	302.89	281.87	328.90	319.94	338.44	291.90	296.40	318.30	317.80	NA
Italy	101.32	89.78	107.80	157.18	170.57	177.15	150.05	157.50	173.70	197.90	NA
Japan	507.00	478.24	449.71	412.57	424.68	436.15	464.93	466.20	490.40	423.10	NA
Netherlands	128.27	110.52	104.38	125.21	126.04	120.10	120.20	118.60	148.70	141.80	132.80
New Zealand	116.29	215.30	189.28	192.43	198.72	184.89	163.40	180.10	202.70	216.80	221.70
Spain	258.70	247.97	247.43	166.09	152.13	152.41	127.10	135.50	159.00	168.70	NA
Switzerland	319.62	255.67	220.29	253.61	282.96	298.26	265.30	267.70	296.90	272.80	237.50
United Kingdom	148.68	163.86	143.08	158.45	162.01	157.60	137.50	141.60	127.10	92.0	NA
United States	124.44	114.04	112.50	111.44	101.04	106.34	113.80	113.80	100.80	129.20	135.10
OECD Europe	147.21	134.21	135.16	156.91	161.22	167.34	151.90	NA	NA	NA	NA
OECD	136.20	131.20	123.16	141.80	145.20	148.40	145.10	NA	NA	NA	NA
B. FOR HOUSEHOLD USE											
Australia	187.51	247.74	264.12	268.78	287.60	283.42	276.56	312.20	317.90	332.80	NA
Austria	472.50	360.99	331.52	391.52	397.86	420.11	396.30	405.83	459.70	468.30	430.80
Belgium	365.72	345.58	340.94	415.62	418.56	430.48	406.40	435.30	487.10	451.80	413.30
Canada	149.62	170.67	175.34	185.48	181.59	184.44	176.92	175.58	162.20	169.70	170.60
Finland	147.08	138.27	142.43	176.84	170.24	155.41	112.40	131.10	177.90	181.40	170.30
France	455.19	432.29	406.13	474.46	461.96	499.98	456.53	459.62	500.50	470.40	NA
Germany	373.58	318.57	311.71	396.53	424.59	455.12	425.35	436.30	476.80	438.90	NA
Ireland	553.76	443.23	412.46	481.32	476.21	506.46	432.65	441.04	473.60	472.80	NA
Italy	347.97	440.63	469.75	642.32	760.44	793.83	636.13	666.30	667.20	NA	NA
Japan	832.28	977.69	989.49	945.99	1016.43	1072.45	1204.14	1307.90	1410.70	1294.1	NA
Netherlands	327.51	281.09	249.79	335.49	367.29	383.72	309.80	323.88	360.90	363.40	360.00
New Zealand	143.18	225.91	223.00	231.29	254.53	238.23	253.90	296.90	363.10	415.50	437.50
Spain	541.09	483.24	484.51	NA	660.17	687.98	553.67	540.90	609.50	613.40	NA
Switzerland	398.18	451.85	401.57	481.75	491.23	510.33	428.98	448.26	537.80	505.70	437.70
United Kingdom	240.51	299.86	291.77	329.08	335.56	344.46	282.52	308.90	328.80	325.70	NA
United States	224.61	210.74	216.91	233.77	237.81	227.31	237.21	246.50	244.30	264.30	276.20
OECD Europe	331.09	347.81	344.55	430.85	468.02	489.35	398.90	411.50	441.00	374.90	NA
OECD	346.80	377.50	288.70	440.40	476.10	498.30	332.90	345.20	362.00	337.60	NA

0.95 tonne of oil approximate 10^7 K. Calories of natural gas.

NA= Not Available GCV.=Gross calorific Value

Source= International Energy Agency's "Energy Prices and Taxes". Fourth Quarter of 1997.

XIV.22 CRUDE OIL IMPORT COSTS IN US DOLLARS/BBL (AVERAGE UNITVALUE, CIF)

Country	1993	1994	1995	1996	1997
IEA*	16.37	15.65	17.19	20.52	19.11
IEA Europe*	16.14	15.63	17.06	20.67	18.88
Australia	17.91	16.76	18.53	21.81	21.78
Belgium	15.84	15.41	16.94	20.53	18.65
Canada	17.19	16.30	17.76	21.26	20.59
France	16.05	15.76	17.14	20.82	18.99
Germany	16.88	15.81	17.07	20.68	19.01
Greece	15.09	15.17	16.54	20.08	18.45
Italy	15.87	15.49	16.90	20.53	18.83
Japan	17.47	16.48	18.02	20.55	20.55
Netherlands	15.53	15.20	16.92	20.39	18.37
Spain	15.13	15.24	16.96	20.45	18.34
Sweden	16.60	15.81	17.23	20.86	18.90
Turkey	16.05	15.52	16.78	20.25	18.79
U.K.	16.58	15.83	17.29	21.08	19.32
USA	15.87	15.06	16.74	20.16	18.34

* = Computed across all countries of the region using import volumes as current weights. For reasons as confidentiality, data for some countries are not listed separately.

Source: Energy Prices and taxes, Ist Quarter, 1998, International Energy Agency Publication.

XIV.23 DEVELOPMENT OF SPOT PRICES OF KEY OPEC CRUDE OILS SINCE JANUARY 1991

(US $ barrel)

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export) 31	Iraq Basrah 34	UAE Murban 39.10	Qatar Dukhan 10
1991							
January	20.70	16.70	20.20	-	-	-	-
February	15.31	11.26	15.11	-	-	-	-
March	15.94	11.84	15.89	-	-	-	-
April	16.31	12.71	16.29	-	-	-	-
May	16.59	13.39	16.97	-	-	-	-
June	16.13	12.93	16.23	-	-	-	-
July	17.02	13.88	16.82	-	-	-	-
August	17.38	14.28	17.19	-	-	-	-
September	18.28	15.08	18.35	-	-	-	
October	19.64	16.44	19.45	-	-	-	-
November	19.03	15.83	18.99	-	-	-	-
December	16.25	13.16	15.98	-	-	-	-
1992							
January	15.90	12.70	15.80	-	-	-	-
February	16.48	13.28	16.33	-	-	-	-
March	16.45	13.35	16.30	-	-	-	-
April	17.37	14.52	17.18	-	-	-	-
May	18.36	15.76	18.18	16.81	-	-	-
June	19.79	17.19	19.54	18.24	-	-	-
July	19.29	16.69	19.09	17.74	-	-	-
August	18.63	16.03	18.43	17.08	-	-	-
September	19.10	16.50	18.91	17.50	-	-	
October	18.94	16.34	18.74	17.34	-	-	-
November	17.78	15.38	17.70	16.28	-	-	-
December	16.88	14.48	16.78	15.29	-	-	-
1993							
January	15.92	13.52	15.74	14.59	-	-	-
February	16.84	14.32	16.48	15.34	-	-	-
March	17.39	14.44	16.25	15.69	-	-	-
April	17.33	14.38	16.25	15.63	-	-	-
May	16.87	14.03	16.43	15.17	-	-	-
June	16.37	13.57	15.17	14.67	-	-	-
July	15.12	12.32	15.16	13.42	-	-	-
August	15.26	12.50	15.25	13.59	-	-	-
September	14.70	12.10	13.95	12.74	-	-	-
October	15.48	13.08	14.41	13.88	-	-	-
November	14.30	11.88	13.25	12.75	-	-	-
December	12.50	10.20	12.44	11.20	-	-	-

Cont'd....

XIV.23 (CONTD.) DEVELOPMENT OF SPOT PRICES OF KEY OPEC CRUDE OILS SINCE JANUARY 1991

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export) 31	Iraq Basrah 34	UAE Murban 39.10	Qatar Dukhan 10
1994							
January	13.63	11.18	13.09	11.88	-	-	-
February	13.46	11.01	13.01	11.71	-	-	-
March	12.94	10.99	12.58	11.68	-	-	-
April	14.27	12.27	13.66	13.07	-	-	-
May	15.43	13.80	14.58	14.18	-	-	-
June	16.46	14.80	15.89	15.12	-	-	-
July	17.07	15.67	16.56	16.07	-	-	-
August	16.63	15.33	16.20	15.55	-	-	-
September	15.89	14.99	15.42	14.69	-	-	
October	16.07	14.37	15.51	14.92	-	-	-
November	16.68	15.00	16.13	15.55	-	-	-
December	16.19	14.59	15.78	15.14	-	-	-
1995							
January	16.76	15.24	16.33	15.71	-	-	-
February	17.29	15.81	16.82	16.24	-	-	-
March	17.02	15.92	16.62	15.97	-	-	-
April	18.03	17.08	17.56	17.38	-	-	-
May	17.82	16.93	17.22	17.15	-	-	-
June	16.79	15.74	16.05	15.74	-	-	-
July	15.67	14.62	14.89	15.02	-	-	-
August	15.96	14.61	15.34	15.30	-	-	-
September	16.15	15.00	15.61	15.35	-	-	-
October	15.54	14.38	15.01	14.74	-	-	-
November	16.30	15.15	15.69	15.50	-	-	-
December	17.61	16.61	16.97	16.81	-	-	-
1996							
January	17.39	16.24	16.92	16.51	-	-	-
February	17.34	16.19	16.51	15.96	-	-	-
March	19.10	17.95	17.26	16.79	-	-	-
April	20.67	19.37	18.11	17.56	-	-	-
May	18.85	17.55	17.58	16.96	-	-	-
June	18.02	16.72	17.51	17.08	-	-	-
July	18.66	16.96	18.32	17.47	-	-	-
August	19.53	17.71	19.14	18.26	-	-	-
September	21.12	19.37	20.72	19.87	-	-	-
October	22.54	20.87	21.94	21.34	-	-	-
November	21.91	20.26	21.24	20.73	-	-	-
December	23.05	21.15	22.41	21.69	-	-	-
1997							
January	22.58	20.68	22.26	21.37	-	-	-
February	20.03	18.13	19.81	18.88	-	-	-
March	19.11	17.25	18.89	18.04	-	-	-

Source: Monthly OPEC Bulletin.

XIV.24 DEVELOPMENT OF SPOT PRICES OF MAJOR PETROLEUM PRODUCTS IN KEYTRADING CENTRES OFTHEWORLD DURING 1996 AND 1997

(US$/barrel)

Market/Product:	1996					1997			
	Jan.	March	June	Sept.	Dec.	Jan.	March	June	Sept.
NAPHTHA:									
North European Market, FOB Rotterdam	19.00	19.65	19.54	23.49	25.10	25.20	21.80	20.16	21.53
South Europeon Market, FOB Italy	17.25	17.67	17.62	21.59	23.31	23.47	20.29	18.82	20.17
Caribbean Cargoes	18.97	20.51	19.04	22.78	25.05	25.87	22.85	19.43	19.03
Singapore Cargoes	17.57	18.37	18.75	21.03	25.05	24.60	23.79	20.73	20.51
Middle East FOB	16.69	17.77	18.33	20.72	24.00	23.93	22.92	20.53	20.58
GASOLINE (Premium 0.15 g/Litre)									
North European Market, FOB Rotterdam	19.58	25.62	22.45	24.61	26.06	25.87	24.80	22.97	25.04
South European Market, FOB Italy	19.11	22.48	22.93	24.24	25.21	25.90	24.68	22.43	24.50
New York, Unl. gasoline 87	20.94	24.47	24.07	25.77	28.40	28.21	25.51	22.89	25.58
Singapore Cargoes	20.81	23.42	23.60	22.83	25.79	26.05	28.55	23.77	23.14
JET KERO,									
North European market, FOB Rotterdam	23.57	25.37	22.46	30.96	30.70	30.99	23.60	22.64	23.38
South European market, FOB Italy	22.28	25.29	21.33	29.52	29.14	28.66	21.54	20.13	20.75
US East Coast Market, New York	25.15	28.76	23.44	30.62	31.46	30.57	24.41	22.91	23.65
Caribbean Cargoes	23.00	25.19	21.87	29.37	29.72	29.82	23.93	21.81	23.12
Singapure Cargoes	30.66	27.34	23.83	29.79	33.64	30.86	27.29	23.67	22.51
Middle East FOB	28.96	25.88	22.49	28.46	31.85	28.96	25.62	22.23	21.29
GAS OIL									
North European Market, FOB Rotterdam	21.95	24.53	21.62	29.51	28.77	29.07	22.11	21.58	21.92
Sourth European Market, FOB Italy	21.12	23.26	20.49	28.18	27.60	27.05	20.89	19.72	20.48
US East Coast Market, New York	23.12	26.14	21.52	28.26	30.26	29.32	22.92	21.82	22.18
Caribbean Cargoes	22.02	23.68	21.28	27.80	28.38	27.82	22.30	21.53	22.17
Singapore Cargoes	25.24	25.87	24.32	27.79	32.44	27.95	27.35	22.87	23.16
Middle East, FOB	23.44	24.33	22.90	26.39	30.55	25.94	25.60	21.35	21.87
FUEL OIL									
North European (1%s)	17.31	17.82	14.83	16.97	19.80	17.88	14.41	14.32	14.79
-do- (3.5%s)	15.06	16.72	12.86	15.79	17.75	15.93	13.03	12.73	14.39
South European (1%s)	17.46	17.16	15.19	17.27	19.82	16.79	14.87	14.66	14.82
-do- (3.5%s)	14.53	14.74	10.02	15.73	16.53	15.39	11.40	11.58	12.96
US East Coast. New York (1%s)	21.84	18.29	16.96	18.52	21.89	18.58	15.64	16.13	16.63
-do- (2.2%S)	17.96	16.13	14.76	16.63	18.62	16.91	13.99	14.82	16.21
Caribbean Cargoes (2.0%s)	16.45	15.10	13.41	15.42	17.42	15.69	12.77	13.85	15.20
-do- (2.8%s)	14.33	14.05	13.01	15.06	16.21	15.13	12.39	13.22	14.71
Singapore Cargoes (0.3%s)	16.66	16.12	17.53	18.56	22.60	21.86	17.55	14.95	15.83
-do- (180C)	16.75	15.83	13.16	16.63	17.77	15.63	14.57	14.55	16.02
-do- (380c)	16.54	15.07	12.82	16.76	17.58	15.34	14.20	14.25	16.02
Middle East FOB (180c)	15.63	14.61	12.09	15.55	16.50	14.28	13.31	13.62	14.80

Source: OPEC Monthly Bulletin.

XIV.25 WORLD SURVEY OF SELECTED PETROLEUM PRODUCTS PRICES 1996

Country	US$ Exchange Rate in National currencies	Gasoline (US$Litre)	Automotive Diesel Oil (US $ Litre)	Heavy Fuel Oil for Industry (US $/tonnes)	Light Fuel Oil For House Hold (US$/1000 litres)	Light Fuel Oil For industry Use (US$/1000 litres)
1	2	3	4	5	6	7
Australia	1.28	0.576	0.577	N.A.	N.A.	N.A.
Austria	10.58	N.A.	0.867	N.A.	452.31	N.A.
Belgium	30.98	1.203	0.850	139.46	281.63	232.74
Canada	1.36	N.A.	N.A.	126.74	280.92	179.38
Denmark	5.80	N.A.	0.828	176.61	736.12	317.18
Finland	4.59	N.A.	0.816	210.67	346.25	283.82
France	5.11	1.211	0.837	171.46	428.83	305.71
Germany	1.51	1.169	0.809	151.50	321.93	280.00
Greece	240.7	0.912	0.652	212.96	574.42	486.80
Ireland	0.63	N.A.	N.A.	N.A.	N.A.	N.A.
Italy	1543.0	1.222	0.927	186.30	892.22	749.76
Japan	108.8	N.A.	N.A.	172.73	407.31	279.43
Luxembourg	30.98	0.941	0.698	152.71	286.44	255.75
Netherlands	1.69	1.269	1.002	188.98	379.70	N.A.
New Zealand	1.45	N.A.	0.330	228.93	N.A.	236.10
Norway	6.46	1.400	1.169	354.03	548.86	440.61
Portugal	154.20	1.049	0.724	180.86	700.75	667.39
Spain	126.7	0.927	0.714	194.53	358.95	309.44
Sweden	6.71	1.221	0.982	207.10	627.70	249.29
Switzerland	1.24	1.016	1.001	172.33	259.87	210.84
Turkey	81300.00	0.692	N.A.	184.31	543.61	N.A.
UK	0.64	0.961	0.900	152.95	257.85	211.81
USA	1.00	N.A.	0.324	126.26	278.82	168.74

Source: International Energy Agency - Energy prices and taxes First Quarter 1997.

XIV.26 CONSUMER RETAIL PRICES OF SELECTED PETROLEUM PRODUCTS INVARIOUS COUNTRIES OFTHEWORLD AS ON 1.1.1997

Sl. No.	Country	LPG	MOGAS	ATF	KEROSENE	DIESEL	FUEL Oil 1 US$	EXCHANGE Rate
		(.....U.S. Cents/litre.....)						
1.	Singapore	26.95	78.57	N.A.	25.07	39.35	N.A.	1.40 cents
2.	Thailand*	22.57	35.21	N.A.	38.91	32.97	17.64	25.39 baht
3.	Hong Kong*	52.34	124.94	31.4	39.53	94.39	29.12	7.74 HK$
4.	Malaysia	25.34	44.32	N.A.	19.62	26.23	N.A.	2.482 Mal. cents
5.	Philoppines	27.33	38.71	38.76	28.84	31.99	15.93	26.35 pessos
6.	S. Korea	26.59@@	97.96	N.A.	45.85	44.31	22.33	846.30 won
7.	Taiwan	44.09	64.36	35.42	49.45	46.55	16.18	27.50 Taiwan $
8.	India	13.09	63.85	40.80	7.57	23.89	18.49	35.874 Rs.
9.	Australia	N.A.	59.27	N.A.	N.A.	61.37	N.A.	1.284 Aus. cents
10.	Canada	N.A.	43.30	N.A.	N.A.	41.23	N.A.	1.351 Canadian cents

* : Price as on 1.6.1996
@@ : Average of Propane and Butane.
Source : PEL, London.

XIV.27 POSTED AIRFIELD PRICES OF JET A-1 FUEL AT MAJOR INTERNATIONAL AIRPORTS AS ON 1ST APRIL OF EACHYEAR

(U.S.C/U.S. Gallon)

Countries / Port	Prices of Jet A.I. Fuel as on 1st April													
	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Australia														
Perth	114.88	114.02	87.02	100.94	105.11	N.A.	N.A.	N.A.	N.A.	52.90$	N.A.	N.A.	N.A.	N.A.
Sydney	114.88	114.02	87.02	100.94	105.11	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Bahrain	153.40	148.46	120.02	120.94	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Belgium														
Brussels	159.00	128.00	105.00	115.00	115.00	N.A.	N.A.	N.A.	N.A.	140.00	N.A.	N.A.	N.A.	N.A.
Egypt														
Cairo	155.20	121.13	105.00	87.00	93.00	71.49	74.93	119.10	76.80	N.A.	N.A.	N.A.	N.A.	N.A.
Ethopia														
Addisababa	156.06	150.32	146.66	115.29	96.09	N.A.	N.A.	N.A.	N.A.	129.13	N.A.	N.A.	N.A.	N.A.
France														
Paris	147.90	117.24	138.29	100.59	124.89	61.61	66.24	73.37	61.56	65.28	59.88	60.94	77.62	70.42
Germany														
Frankfurt	147.32	107.69	112.84	110.90	119.10	63.20	67.96	74.95	65.07	66.19	60.00	62.29	78.21	66.87
Netherland														
Amsterdam	142.60	115.00	120.00	120.00	120.00	61.20	65.22	68.95	63.41	150.00	N.A.	N.A.	N.A.	N.A.
Italy														
Rome	165.00	135.00	135.00	125.24	138.71	61.58	68.48	75.81	68.70	71.22	63.87		82.03	71.97
Kenya														
Nairobi	144.00	168.10	157.61	163.00	160.00	N.A.	N.A.	N.A.	N.A.	95.00	N.A.	N.A.	N.A.	N.A.
Lebanon														
Beirut	185.00	165.00	165.00	100.00	100.00	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Malaysia														
Kualalumpur	137.00	135.00	135.00	135.00	135.00	N.A.	N.A.	N.A.	N.A.	64.95	N.A.	N.A.	N.A.	N.A.
Mauritius														
Plaisance	140.00	126.00	125.00	60.00	74.46	N.A.	N.A.	N.A.	N.A.	98.00	N.A.	N.A.	N.A.	N.A.
Singapore														
Paya lebar/Chan-gi	137.00	128.50	128.50	90.00	90.00	51.34	63.10	69.07	60.61	61.85	58.42	57.87	71.33	66.99
Switzerland														
Geneve	155.73	105.58	118.94	118.93	118.15	62.90	67.93	70.51	62.31	137.30	59.77	64.71	78.53	73.56
U.A.E.														
Abu Dhabi	154.88	100.00	73.28	65.44	69.11	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Sharjah/Dubai	154.88	147.58	119.93	99.98	109.95	73.48	78.11	99.31	75.32	120.00	76.32	80.00	92.00	91.00
UNITED KINGDOM														
London (h)	154.76	129.89	132.14	136.41	182.17	61.95	66.37	72.71	65.98	64.98	56.80	57.00	73.68	63.55
Karachi	123.28	175.50	175.50	175.50	154.50	N.A	N.A.	N.A.	N.A.	135.00	N.A.	N.A.	N.A.	N.A.
Kuwait	113.96	98.15	82.44	70.59	72.73	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
New York (2)	112.00	77.75	59.87	49.10	60.80	62.96	64.98	65.00	59.03	58.41	53.07	52.74	67.63	62.07
Tehran (1)	100.96	122.13	116.23	135.44	N.A.	N.A.	N.A.	N.A.	N.A	N.A.	N.A.	N.A.	N.A.	N.A.
Japan														
Tokyo	118.96	95.00	86.76	60.00	100.00	78.31	85.75	95.49	82.68	90.82	79.59	72.03	82.63	87.20
Bombay	145.22	106.07	105.75	101.39	101.84	89.90	89.59	128.22	88.06	N.A	78.00	93.00	110.40	119.40
Delhi														
Palam	150.22	108.92	108.75	104.10	104.57	91.82	91.28	133.31	88.30	N.A.	78.00	82.93	99.36	107.46

(1) Monopoly Price
❂ As on 1st January, 1988.

(2) Air India Contract Price.
❂❂: Relates to average price.

$ Australian cents per litre.
N.A.: Not Available.

XIV.28 INTERNATIONAL PETROLEUM PRICE INDEX DURING 1990-1997 (US$/BARREL)

(1990 = 100)

Year	Petroleum Spot				
	Average Crude Price	Dubai Fateh	U.K. Brent	Alaskan North Slope	West Taxes Intermediate
1990	100.0	100.0	100.0	100.0	100.0
1991	83.0	80.90	83.3	83.3	87.8
1992	82.6	84.0	80.6	82.4	84.1
1993	73.2	73.1	71.0	74.5	75.5
1994	69.2	72.1	65.9	71.6	70.0
1995	74.7	78.8	71.1	78.3	74.9
1996	88.9	90.6	86.1	--	90.2
1997					
January	101.1	104.0	99.6	--	102.0
February	89.0	90.9	97.8	--	89.3
March	84.2	88.3	86.8	--	84.5

Source: International Financial Statistics Year Book June 1997.

XIV.29 INTERNATIONAL PETROLEUM SPOT PRICE INDEX DURING 1984-1997 (US$/BARREL)

Year	Petroleum Spot				
	Average Crude Price	Dubai Fateh	U.K. Brent	Alaskan North Slope	West Taxes Intermediate
1984	-	27.49	28.80	28.54	29.38
1985	-	26.46	27.33	27.14	28.14
1986	13.82	13.08	14.50	13.89	15.10
1987	17.79	16.94	18.34	18.08	19.16
1988	14.15	13.22	14.97	14.26	15.96
1989	17.19	15.70	18.22	17.65	19.60
1990	22.05	20.46	23.99	22.03	24.45
1991	18.30	16.54	19.99	18.35	21.46
1992	18.22	17.19	19.34	18.15	20.46
1993	16.13	14.96	17.04	16.40	18.46
1994	15.90	14.76	15.82	15.76	17.10
1995	17.16	16.13	17.06	17.24	18.32
1996	20.42	18.55	20.65	--	22.05
1997					
January	23.22	21.28	23.47	--	24.93
February	20.43	18.60	20.83	--	21.83
March	19.33	18.07	19.21	--	20.66

Source: International Financial Statistics Year Book June 1997.

XIV.30 TANKER FLEET DEVELOPMENT IN OPEC MEMBER COUNTRIES, 1992-1996 (AS AT YEAR END-IN THOUSAND DWT)

	1992		1993		1994		1995		1996	
	No.	DWT	No.	DWT	No.	DWT	No.	DWT	No.	DWT
Algeria	1	22.3	1	22.3	1	22.3	1	22.3	1	22.3
Indonesia	20	524.5	22	583.6	22	583.6	24	642.4	25	726.7
I.R. Iran	34	5,945.6	32	5,631.2	28	5,536.0	14	2,083.1	12	3,301.0
Iraq	17	1,493.0	17	1,493.0	17	1,493.0	17	1,493.0	17	1,493.0
Kuwait	21	2,549.1	21	2,549.1	28	3,441.5	28	3,441.5	28	3,441.5
S.P. Libyan A.J.	11	1,321.7	11	1,321.7	11	1,321.7	11	1,321.7	10	1,234.7
Nigeria	2	406.5	2	406.5	3	427.5	3	417.0	2	406.5
Qatar	2	230.5	2	230.5	3	325.7	2	190.2	2	190.7
Saudi Arabia	11	595.8	11	665.6	12	680.6	13	717.1	15	796.5
UAE	17	1,376.5	15	777.9	17	1,151.8	15	778.3	15	785.5
Venezuela	18	838.4	16	711.0	15	681.5	14	675.5	11	559.9
TOTAL OPEC	**154**	**15,303.9**	**150**	**14,392.4**	**157**	**15,665.2**	**142**	**11,782.1**	**138**	**12,958.3**
TOTAL WORLDa)	**3,177**	**274,341.6**	**3,198**	**280,108.6**	**3,192**	**278,181.2**	**3,200**	**277,361.9**	**3,255**	**283,742.0**
OPEC percentage		5.6		5.1		5.6		4.2		4.6

a) Including commercial units, government-owned vessels and tankers converted for purposes other than transportation. Totals may not add up, due to independent rounding.
Source: World Tanker Fleet Review, Jacobs & Partners Ltd; Direct communications to the Secretariat.

XIV.31 WORLD TANKER FLEET A) BY AGE, 10,000 DWT AND OVER (AS AT YEAR END-IN THOUSAND DWT)

	1981 & earlier		1982-1986		1987-1991		1992-1996		Total	
	No.	DWT	No.	DWT	No.	DWT	No.	DWT	No.	DWT
10,000/ 16,499	157	2,130.1	75	1,008.5	39	554.1	58	730.3	329	4,423.0
16,500/ 24,999	170	3,571.8	79	1,616.3	13	255.3	20	367.4	282	5,810.8
25,000/ 29,999	135	3,782.4	67	1,935.7	42	1,224.4	29	837.8	273	7,780.3
30,000/ 34,999	181	5,722.8	21	691.2	7	219.9	14	459.4	223	7,093.2
35,000/ 39,999	135	5,064.9	56	2,150.3	46	1,789.3	49	1,833.0	286	10,837.6
40,000/ 44,999	19	800.1	30	1,271.8	32	1,359.3	36	1,527.9	117	4,959.1
45,000/ 49,999	12	575.2	37	1,755.8	21	974.0	33	1,522.2	103	4827.1
50,000/ 59,999	77	4,265.0	27	1,530.0	10	575.2	2	113.9	116	6,484.2
60,000/ 69,999	55	3,558.5	51	3,256.2	21	1,392.2	24	1,586.4	151	9,793.3
70,000/ 79,999	48	3,747.5	8	633.2	3	235.4	2	152.0	61	4,768.0
80,000/ 89,999	124	10,648.1	38	3,237.4	33	2,786.0	15	1,281.7	210	17,953.1
90,000/ 99,999	40	3,772.5	13	1,240.0	49	4,666.5	83	7,905.5	185	17,584.4
100,000/124,999	58	6,753.5	12	1,293.9	23	2,517.8	16	1,746.7	109	12,312.0
125,000/139,999	73	9,721.8	6	763.7	28	3,806.0	24	3,254.6	131	17,546.0
140,000/159,999	43	6,446.4	1	146.9	23	3,415.4	37	5,418.6	104	15,427.2
160,000/199,999	18	3,190.9	2	338.8	1	160.5	-	-	21	3,690.2
200,000/249,999	38	8,801.8	7	1,621.0	15	3,568.7	6	1,448.7	66	15,440.3
250,000/279,999	120	31,997.6	5	1,267.7	38	9,982.4	48	12,580.2	211	55,827.8
280,000/319,999	29	8,766.0	4	1,210.8	11	3,131.9	82	24,004.0	126	37,112.7
320,000/349,999	8	2,672.5	-	-	-	-	-	-	8	2,672.5
350,000 & over	46	18,574.8	-	-	-	-	-	-	46	18,574.8
Total	**1,586**	**144,564.1**	**539**	**26,969.1**	**455**	**42,614.2**	**578**	**66,770.2**	**3,158**	**280,917.6**
Total Worldb)									**3,255**	**283,742.0**

a) Commercial fleet as well as tankers converted for purposes other than transportation. b) Includes vessels mentioned under a) and government-owned tankers. Note: Totals may not add up, due to independent rounding. Source: Jacobs & partners Ltd.

XIV.32 INTER-AREA TOTAL OIL MOVEMENTS 1996

(Million Tonnes)

To From	USA	Canada	Maxico	S & Cent. America	Western Europe	Central Europe	Africa	Australasia	China	Japan	Other Asia Pacific@	Rest of World	Unidentified	Total
USA	-	5.8	6.8	11.1	9.3	-	0.5	1.0	0.4	2.1	5.9	1.2	3.0	47.1
Canada	70.0	-	-	0.4	0.8	-	-	-	-	0.1	0.1	-	2.0	73.4
Mexico	61.8	1.1	-	8.6	6.5	-	-	-	-	4.5	-	-	-	82.5
S. Cent. America	126.6	3.1	1.5	-	11.8	-	0.6	-	-	0.2	4.7	-	-	148.5
Western Europe	36.3	18.8	-	2.2	-	11.0	8.6	-	-	0.1	5.1	3.6	-	85.7
Former Soviet Union	1.2	-	-	2.2	92.3	31.0	0.4	-	0.9	0.5	3.8	2.3	25.0	159.6
Central Europe	0.2	-	-	-	3.4	-	-	-	-	-	0.3	0.5	-	4.4
Middle East	81.7	5.6	-	28.3	175.4	14.9	29.4	10.2	12.1	209.6	285.6	-	-	852.8
North Africa	14.6	3.3	-	1.5	101.2	4.0	4.4	-	0.1	0.5	3.5	3.2	-	136.3
West Africa	60.2	1.5	-	13.7	48.9	0.1	0.7	0.4	1.7	1.4	16.9	-	-	145.5
E. & S. Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australasia	1.7	-	-	-	0.1	-	-	-	0.2	2.5	6.4	-	3.0	13.9
China	2.9	-	-	0.1	-	-	-	0.3	-	11.6	9.3	-	-	24.2
Japan	-	-	-	-	-	-	-	-	1.1	-	5.0	0.1	-	6.2
Other Asia Pacific	4.6	-	-	2.0	2.0	-	1.0	13.2	21.3	48.5	6.3	-	-	98.9
Unidentified*	3.8	1.7	-	-	21.2	-	1.6	1.6	0.6	-	1.1	-	-	31.6
Total Imports	**465.6**	**40.9**	**8.3**	**70.1**	**472.9**	**61.0**	**47.2**	**26.7**	**38.4**	**281.6**	**354.0**	**10.9**	**33.0**	**1910.6**

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use, etc.
@ Includes South Asia.
Source: British Petroleum Statistical Review of World Energy 1997.

XIV.33 WORLD PRIMARY ENERGY CONSUMPTION BY FUEL*-1996

(Million Tonnes Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Nuclear Energy	Hydro-Electric	Total
USA	833.0	569.2	516.0	183.3	28.8	2130.3
Canada	79.5	66.4	23.1	23.9	30.3	223.1
Mexico	73.8	28.1	5.2	1.9	2.5	111.5
Total North America	**986.3**	**663.7**	**544.3**	**209.1**	**61.6**	**2464.9**
Argentina	21.1	27.9	1.4	1.9	2.4	54.6
Brazil	74.2	4.7	10.7	0.6	22.7	112.9
Chile	10.5	1.5	2.0	-	1.5	15.5
Colombia	12.6	4.2	3.1	-	3.0	22.9
Venezuela	18.9	28.8	0.2	-	4.6	52.5
Other S. & Cent. America	66.4	8.4	0.9	-	7.3	83.0
Total S. & Cent. America	**203.7**	**75.5**	**18.3**	**2.5**	**41.5**	**341.4**
Austria	11.4	6.6	2.3	-	3.1	23.5
Belgium & Luxembourg	28.7	11.6	9.1	10.7	0.2	60.2
Bulgaria	6.7	4.2	6.9	4.7	0.2	22.5
Czech Republic	7.5	6.9	23.3	3.3	0.2	41.3
Denmark	11.4	3.4	9.0	-	†	23.7
Finland	10.3	3.0	3.9	5.1	1.0	23.2
France	91.0	29.0	14.7	102.8	6.0	243.4
Germany	137.4	75.2	88.9	41.7	1.8	345.0
Greece	18.5	†	8.2	-	0.4	27.1
Hungary	7.0	9.9	3.4	3.7	†	24.0
Iceland	0.8	-	0.1	-	0.4	1.3
Republic of Ireland	5.9	2.7	1.9	-	0.1	10.6
Italy	94.1	46.9	11.7	-	4.0	156.8
Netherlands	37.4	37.5	9.3	1.1	†	85.3
Norway	10.5	†	0.6	-	8.9	20.1
Poland	16.9	9.5	72.0	-	0.3	98.8
Portugal	12.1	-	3.9	-	0.9	16.9
Romania	13.9	22.3	9.8	0.4	1.4	47.7
Slovakia	3.8	4.6	5.9	2.9	0.5	17.7
Spain	58.7	8.4	15.4	14.5	3.6	100.6
Sweden	17.4	0.8	2.4	19.3	4.4	44.3
Switzerland	12.2	2.2	0.2	6.4	2.6	23.6
Turkey	28.8	8.1	20.7	-	2.6	60.1
United Kingdom	83.7	76.7	44.9	24.5	0.3	230.1
Other Europe	14.0	6.9	11.6	1.2	2.8	36.5
Total Europe	**740.1**	**376.4**	**380.1**	**242.3**	**45.7**	**1784.3**
Azerbaijan	8.5	7.2	-	-	0.2	15.9
Belarus	12.3	11.6	0.2	-	†	24.1
Kazakhstan	11.3	9.5	27.9	†	0.8	49.5
Russian Federation	128.0	317.0	119.0	28.1	13.2	605.4
Turkmenistan	3.9	7.6	†	-	-	11.5
Ukraine	17.3	70.4	30.5	20.5	0.8	139.5
Uzbekistan	6.6	40.0	1.6	-	0.6	48.8
Other Former Soviet Union	8.6	10.3	1.7	4.1	3.7	28.5
Total Former Soviet Union	**196.5**	**473.6**	**180.9**	**52.7**	**19.3**	**923.2**
Iran	57.1	34.3	1.4	-	0.7	93.4
Saudi Arabia	53.4	37.2	-	-	-	90.6
United Arab Emirates	17.2	25.0	-	-	-	42.2
Other Middle East	62.8	31.8	4.9	-	0.4	99.9
Total Middle East	**190.5**	**128.3**	**6.3**	-	**1.1**	**326.1**
Algeria	9.4	22.1	0.4	-	†	31.8
Egypt	24.6	10.3	1.1	-	1.0	37.0
South Africa	20.6	-	81.7	3.2	0.3	105.8
Other Africa	55.7	10.7	6.5	-	4.9	77.8
Total Africa	**110.3**	**43.1**	**89.7**	**3.2**	**6.2**	**252.4**
Australia	35.7	17.2	42.9	-	1.4	97.1
Bangladesh	2.4	6.8	0.1	-	0.1	9.3
China	172.5	15.9	666.0	3.7	15.9	874.0
India	78.7	19.5	140.3	2.1	6.0	246.7
Indonesia	42.9	27.1	7.5	-	0.7	78.2
Japan	269.9	59.5	88.3	76.8	7.4	501.8
Malaysia	18.5	14.5	1.5	-	0.6	35.2
New Zealand	5.8	4.2	1.2	-	2.3	13.4
Pakistan	17.1	13.7	2.2	0.1	2.1	35.2
Philippines	17.5	†	1.5	-	0.6	19.6
Singapore	26.7	1.4	-	-	-	28.0
South Korea	101.4	12.2	31.6	19.1	0.4	164.7
Taiwan	35.3	4.0	19.3	9.7	0.8	69.2
Thailand	38.0	10.1	7.6	-	0.6	56.3
Other Asia Pacific	23.0	4.9	27.4	-	3.8	59.1
Total Asia Pacific	**885.4**	**211.0**	**1037.4**	**111.5**	**42.7**	**2287.8**
TOTAL WORLD	**3312.8**	**1971.6**	**2257.0**	**621.3**	**218.1**	**8380.1**
Of which OECD	1975.5	1063.6	947.2	515.3	113.2	4614.3
European Unions	618.0	301.8	225.6	219.7	25.8	1390.7
Other EMEs@	1078.4	377.0	1019.3	40.4	80.4	2595.4

† : Less than 0.05
@ : Excludes Central Europe and Former Soviet Union.
* : Primary energy comprises commercially trade fuels only. Excluded are fuels such as wood, peat and animal waste.

XIV.34 PER CAPITA PRIMARY ENERGY CONSUMPTION-SOME INTERNATIONAL COMPARISONS (1996)

(Kg. Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Nuclear Energy	Hydro-Elctric	Total
USA	3611	2163	1961	697	109	8097
Canada	2686	2243	780	807	1024	7537
Maxico	804	306	57	21	27	1214
Total North America	**2565**	**1726**	**1416**	**544**	**160**	**6408**
Austria	1407	815	284	-	383	2901
Belgium & Luxemburg	2733	1105	867	1019	19	5733
Denmark	2192	654	1731	-	+	4558
Finland	2020	588	765	1000	196	4549
France	1566	499	253	1769	103	4189
Germany	1678	918	1085	509	22	4212
Greece	1762	+	781	-	38	2581
Iceland	1143	-	143	-	571	1857
Republic of Ireland	1639	750	528	-	28	2944
Itlay	1647	820	204	-	70	2741
Netherlands	2413	2419	600	71	+	5503
Norway	2386	+	136	-	2023	4568
Purtgal	1222	-	394	-	91	1707
Spain	1497	214	393	370	92	2566
Sweden	1977	91	273	2193	500	5034
Switzerland	1743	314	28	914	371	3371
Turkey	471	132	339	-	42	984
United Kingdom	1431	1311	768	419	5	3933
Czechoslovakia	728	669	2262	320	19	4010
Hungary	686	970	333	363	+	2353
Poland	438	246	1865	-	8	2560
Others	237	117	196	20	47	617
Total Europe	**1313**	**668**	**674**	**430**	**81**	**3166**
Ex-USSR	748	1803	689	201	73	3516
Total Middle East	**1403**	**945**	**46**	-	**8**	**2401**
Australia	1972	950	2370	-	77	5365
China	144	13	555	3	13	728
India*	85	21	151	2	6	265
Indonasia	222	140	39	-	4	404
Japan	2156	475	705	613	59	4008
Malaysia	920	721	75	-	30	1751
New Zealand	1611	1167	333	-	639	3722
Phillippines	255	†	22	-	9	286
Singapore	8900	467	-	-	-	9333
Thailand	653	173	130	-	10	967
Others	311	72	140	50	12	586
Total Asia & Australasia	**277**	**66**	**324**	**35**	**13**	**716**
Total World	**584**	**347**	**398**	**109**	**38**	**1477**
of which OECD	2001	1078	960	522	115	4675

* Estimated on the basis of financial year data.

† Negligible

Source (i) BP Statistical Review of World Energy June, 1997

(ii) World Development Report 1997 for population projections.

XIV.35 PER CAPITA CONSUMPTION OF MAIN PETROLEUM PRODUCTS-SOME INTERNATIONAL COMPARISONS 1996

Kg./ per capita

Country/Area	Gasoline	Middle Distillates	Fuel	Others*	Total
1	2	3	4	5	6
USA	1332	985	172	677	3166
Canada	1017	888	192	584	2682
Maxico	244	161	245	152	803
Japan	526	784	461	384	2155
Australasia	714	770	97	332	1912
India	5	51	12	16	84
OECD Europe	168	292	108	119	687

*Includes Refinery Gas LPG, solvents, petroleum coke, bitumen, waxes lubricants and refinery fuel and loss
Sources:1. BP Statistical Review of World Energy 1997.
2. World Development Report 1997 for Population.
Note: Figures for India inserted.

XIV.36 TRENDS INWORLD PRIMARY ENERGY CONSUMPTION: (1975TO 1996)

(Million Tonnes Oil Equivalent)

Year	Oil	Natural Gas	Coal	Hydro Electricity	Nuclear Energy	Total
1	2	3	4	5	6	7
1975	2720.9	1084.5	1715.3	353.4	86.1	5960.2
1976	2891.1	1145.7	1785.4	364.0	106.5	6292.7
1977	2984.2	1167.7	1830.0	373.3	132.1	6487.3
1978	3084.4	1213.3	1860.3	405.6	151.6	6715.2
1979	3141.7	1282.8	1967.9	424.4	155.9	6972.7
1980	3024.1	1296.4	1966.0	433.6	172.9	6893.0
1981	2918.3	1312.1	1959.1	443.2	203.2	6835.9
1982	2820.3	1308.9	2002.2	460.0	222.7	6814.1
1983	2797.3	1325.0	2039.2	482.0	248.0	6891.5
1984	2843.0	1426.5	2114.5	498.7	297.7	7180.4
1985	2826.5	1474.7	2209.6	510.2	350.9	7371.9
1986	2905.2	1487.4	2262.6	519.9	377.4	7552.5
1987	2948.4	1557.8	2341.9	534.3	406.3	7788.7
1988	3038.5	1614.0	2198.9	526.1	435.2	7854.0
1989	3097.8	1707.0	2231.8	526.2	450.6	8013.3
1990	3134.7	1714.1	2200.9	191.3	490.9	7731.9
1991	3141.6	1776.1	2164.5	190.8	535.0	7780.3
1992	3145.6	1759.3	2153.3	190.2	540.8	7789.2
1993	3120.6	1827.1	2142.9	201.0	563.6	7854.7
1994	3189.1	1837.6	2184.9	205.9	573.5	7990.4
1995	3234.6	1883.8	2205.3	216.0	598.2	8137.3
1996(P)	3312.8	1971.6	2257.0	218.1	621.3	8380.1

Source: Various issues of B.P. Statistical Review of World Energy.
P= Provisional.

XIV.37 PRIMARY ENERGY* CONSUMPTIO IN SELECTED COUNTRIES/AREAS OFTHE WORLD 1989-1996

(Million Tonnes Oil Eqvt.)

									Change 1996	1996
share	1989	1990	1991	1992	1993	1994	1995	1996	over 1995	of total
USA	1927.8	1930.7	1923.3	1954.2	1992.9	2034.2	2069.1	2130.3	+3.0%	25.4%
Canada	211.0	202.1	205.4	209.2	214.2	222.9	219.4	223.1	+1.7%	2.7%
Mexico	94.9	99.0	101.7	102.8	103.8	111.6	107.6	111.5	+3.7%	1.3%
Total North America	**2233.7**	**2232.8**	**2230.4**	**2266.2**	**2310.9**	**2368.7**	**2396.1**	**2464.9**	**+2.9%**	**29.4%**
Argentina	42.5	41.2	43.7	44.2	45.8	47.7	49.9	54.6	+9.4%	0.7%
Brazil	91.0	89.7	91.8	95.2	97.4	100.9	106.6	112.9	+5.9%	1.3%
Chile	10.6	11.2	1.3	12.5	12.9	13.7	14.7	15.5	+5.8%	0.2%
Colombia	18.0	19.1	19.6	20.2	21.3	22.0	22.8	22.9	+0.5%	0.3%
Venezuela	38.8	41.5	42.4	43.4	44.6	46.4	51.6	52.5	+1.8%	0.6%
Other S. & Cent. America	67.0	67.5	68.2	70.0	72.3	76.7	79.2	83.0	+4.8%	1.0%
Total S. & Cent. America	**267.9**	**270.2**	**277.0**	**285.5**	**294.3**	**307.4**	**324.8**	**341.4**	**+5.1%**	**4.1%**
Austria	21.3	22.3	23.5	22.6	22.8	22.7	23.1	23.5	+1.5%	0.3%
Belgium & Luxembourg	54.3	55.8	57.5	57.7	55.9	55.7	57.1	60.2	+5.4%	0.7%
Bulgaria	29.8	26.5	21.1	19.5	20.9	20.7	22.6	22.5	-0.4%	0.3%
Czech Republic	53.9	50.2	46.1	40.7	39.3	37.6	37.6	41.3	+9.6%	0.5%
Denmark	16.5	16.8	19.3	17.7	18.9	20.4	19.9	23.7	+19.2%	0.3%
Finland	22.1	22.3	22.6	21.8	21.8	23.2	21.9	23.2	+6.1%	0.3%
France	215.2	220.9	233.0	234.2	235.2	229.7	237.1	243.4	+2.7%	2.9%
Germany	356.9	351.8	342.6	338.2	335.4	332.8	334.5	345.0	+3.1%	4.1%
Greece	23.2	24.0	23.9	24.8	24.9	25.5	26.2	27.1	+3.4%	0.3%
Hungary	28.1	27.1	26.0	23.7	22.9	23.2	23.5	24.0	+2.4%	0.3%
Iceland	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.3	+2.2%	†
Republic of Ireland	8.2	8.5	9.0	9.0	9.3	9.8	10.1	10.6	+5.5%	0.1%
Italy	148.9	151.5	153.0	152.3	149.8	148.6	155.6	156.8	+0.8%	1.9%
Netherlands	74.4	76.4	79.2	78.2	79.8	79.6	82.8	85.3	+3.0%	1.0%
Norway	19.7	20.1	18.6	19.5	20.3	19.9	20.8	20.1	-3.5%	0.2%
Poland	125.8	105.3	100.8	94.7	96.5	95.7	96.3	98.8	+2.6%	1.2%
Portugal	14.3	14.7	15.3	16.3	16.1	16.4	17.8	16.9	-5.4%	0.2%
Romania	70.9	59.0	48.7	46.8	45.5	43.5	46.2	47.7	+3.2%	0.6%
Slovakia	19.7	19.0	18.4	16.9	17.2	16.4	18.2	17.7	-2.5%	0.2%
Spain	89.1	89.0	90.5	94.0	92.0	94.7	98.8	100.6	+1.8%	1.2%
Sweden	42.0	43.1	43.8	42.1	41.3	43.8	42.8	44.3	+3.5%	0.5%
Switzerland	22.0	23.2	23.5	24.2	23.7	24.6	23.6	23.6	-0.2%	0.3%
Turkey	49.6	49.5	50.1	54.8	58.6	54.9	58.3	60.1	+3.3%	0.7%
United Kingdom	212.5	213.3	218.1	217.3	219.7	217.9	218.9	230.1	+5.1%	2.8%
Other Europe	48.3	47.5	43.5	37.7	36.1	32.5	33.6	36.5	+8.4%	0.4%
Total Europe	**1767.8**	**1738.9**	**1729.1**	**1705.9**	**1705.1**	**1691.0**	**1728.5**	**1784.3**	**+3.2%**	**21.3%**
Azerbaijan	22.2	22.9	22.0	18.8	16.2	15.6	15.9	15.9	-0.1%	0.2%
Belarus	39.8	38.4	38.1	37.1	28.6	25.3	23.6	24.1	+2.1%	0.3%
Kazakhstan	71.3	73.6	72.5	73.1	64.6	56.9	50.1	49.5	-1.1%	0.6%
Russian Federation	868.6	853.3	842.4	800.4	735.8	664.5	624.2	605.4	-3.0%	7.2%
Turkmenistan	16.9	13.7	14.0	13.5	11.6	12.9	11.1	11.5	+3.5%	0.1%
Ukraine	234.1	273.4	249.3	219.5	185.1	158.1	147.4	139.5	-5.3%	1.7%
Uzbekistan	48.8	50.5	48.9	46.1	47.1	46.7	46.8	48.8	+4.2%	0.6%
Other Former Soviet Union	70.9	72.0	62.6	44.1	35.4	27.4	27.4	28.5	+3.9%	0.3%
Total Former Soviet Union	**1372.6**	**1397.8**	**1349.8**	**1252.6**	**1124.4**	**1007.4**	**946.5**	**923.2**	**-2.5%**	**11.0%**
Iran	65.2	69.1	71.2	74.4	77.8	84.9	92.9	93.4	+0.6%	1.1%
Saudi Arabia	75.6	78.6	84.2	82.0	84.4	87.4	85.9	90.6	+5.4%	1.1%
United Arab Emirates	27.3	27.9	34.9	33.9	34.9	36.5	38.1	42.2	+11.0%	0.5%
Other Middle East	81.7	78.0	68.8	83.0	87.7	92.9	97.2	99.9	+2.8%	1.2%
Total Middle East	249.8	253.6	259.1	273.2	284.8	301.7	314.1	326.1	+3.8%	3.9%
Algeria	22.8	23.5	24.7	25.3	27.1	27.6	30.3	31.8	+5.0%	0.4%
Egypt	30.5	31.6	31.9	31.9	32.2	32.8	35.2	37.0	+5.1%	0.4%
South Africa	89.3	90.5	89.6	87.2	89.9	95.2	100.7	105.8	+5.0%	1.3%
Other Africa	63.8	66.4	66.5	69.2	71.3	73.7	75.4	77.8	+3.2%	0.9%
Total Africa	**206.4**	**212.0**	**212.7**	**213.6**	**220.5**	**229.3**	**241.6**	**252.4**	**+4.5%**	**3.0%**
Australia	86.4	89.0	84.9	86.4	86.2	91.6	95.3	97.1	+1.8%	1.2%
Bangladesh	6.4	6.8	6.5	7.1	7.8	8.3	9.1	9.3	+2.5%	0.1%
China	658.0	668.0	677.0	703.7	738.2	795.0	835.1	874.0	+4.7%	10.4%
India	171.2	179.6	190.4	200.6	205.5	214.8	230.1	246.7	+7.2%	3.0%
Indonesia	47.6	53.5	56.5	60.6	64.7	68.4	73.9	78.2	+5.9%	0.9%
Japan	408.1	428.3	443.2	450.8	455.7	478.2	491.7	501.8	+2.1%	6.0%
Malaysia	19.2	21.5	23.6	25.2	28.9	31.3	32.9	35.2	+6.8%	0.4%
New Zeland	11.4	11.8	12.4	12.5	12.7	12.8	13.0	13.4	+3.8%	0.2%
Pakistan	23.3	24.8	25.8	27.4	29.2	31.0	32.0	35.2	+10.0%	0.4%
Philippines	12.6	13.0	12.8	15.2	15.8	16.7	18.8	19.6	+4.6%	0.2%
Singapore	18.9	19.5	19.9	22.0	23.7	27.4	28.3	28.0	- 1.0%	0.3%
South Korea	80.7	91.1	102.9	115.5	126.4	136.8	149.9	164.7	+9.9%	2.0%
Taiwan	46.5	48.9	52.2	55.2	58.6	62.3	66.1	69.2	+4.7%	0.8%
Thailand	25.1	28.8	32.6	35.5	40.1	44.8	51.4	56.3	+9.5%	0.7%
Other Asia Pacific	63.3	62.7	60.6	60.8	60.3	58.0	58.1	59.1	+1.8%	0.7%
Total Asia Pacific	**1676.7**	**1747.3**	**1810.3**	**1878.5**	**1953.8**	**2077.4**	**2185.7**	**2287.8**	**+4.7%**	**27.3%**
TOTALWORLD	**7776.9**	**7851.6**	**7859.4**	**7875.5**	**7893.8**	**7982.9**	**8137.3**	**8380.1**	**+3.0%**	**100.0%**
of which OECD	4184.8	4215.4	4241.5	4282.5	4331.5	4410.3	4484.2	4614.3	+2.9%	55.1%
European Union 15	1298.9	1310.4	1331.3	1326.3	1322.9	1320.8	1346.6	1390.7	+3.3%	16.6%
Other EMEs❂	1896.9	1954.0	2009.6	2101.1	2198.8	2333.2	2466.2	2595.4	+5.2%	31.0%

*In this Review, 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 unreallably documented in terms of consumption statistics.

†Less than 0.05 ❂ : Excludes Central Europe and Former Soviet Union

XIV.38 ECONOMIC INDICATORS OF OPEC NATIONS DURING 1996

Country	mid-year population 1996 (million)	GDP 1996 (Bn.$)	per capita GDP 1996($)	Petroleum exports* 1996 (Bn.$)	Total exports FOB (Bn $)	Petroleum exports as % of total exports	Oil re-serves Dec.96 (Bn.bbls)	Gas re-serves Dec.96 (Bn. CM)	Produc-ing oil Wells (Dec. '96)	Refining-capacity Dec.96 (ooobbls/ day)	Exports' of crude oil (000bbls/ day)
1	2	3	4	5	6	7	8	9	10	11	12
Algeria	27.17	44.93	1540	9.16	12.26	74.7	9.98	3700	1189	462.2	390.8
Indonesia	196.5	225.34	1147	7.24	49.81	14.5	4.98	3590	8343	886.4	706.8
I.R. Iran	62.4	140.45	2251	17.66	21.86	80.8	92.60	23100	1092	1092.0	2630.0*
Iraq	21.0	17.80	848	0.68	0.75	90.7	112.00	3360	NR	603.0	88.1*
Kuwait	1.77	28.50	16099	14.10	14.80	95.3	96.50	1489	798	797.0	1258.4
Libya	5.33	23.10	4334	9.54	10.03	95.1	29.50	1313	1454	342.0	1119.0*
Nigeria	114.96	97.60	849	14.89	15.36	96.9	20.83	3476	1793	424.0	1699.0
Qatar	0.66	8.05	12289	3.80	4.47	85.0	3.70	8500	288	63.0	367.0*
Saudi Arabia	18.33	136.69	7458	50.05	57.30	87.3	261.44	5693	1420	1670.0	6109.3
U.A.E.	2.37	44.59	18816	14.98	31.13	48.1	97.80	6243	1427	246.0	1943.2
Venezuela	21.90	70.40	3214	18.52	20.79	89.1	72.67	4052	14418	1183.2	1976.4
TOTAL	**474.38**	**837.44**	**1765**	**160.62**	**238.56**	**67.3**	**802.00**	**64516**	**32690**	**7768.8**	**18288.0**

Note: Total includes figures for Saudi Arbian-Kuwaiti Divided Zone. *= Provisional or estimated figures as of July 11, 1997
NR= Not Reported.
1) Including re-exports and exports of petroleum products from gas plants.

PART-III
PLAN STATISTICS
(159-162)

EIGHTH PLAN

1. EIGHTH PLAN OUTLAY AND ACTUAL EXPENDITURE AND R.E. FOR 1997-98 FOR MINISTRY OF PETROLEUM & NATURAL GAS

(Rs. Crores)

Undertaking	Eighth Plan Outlay 1992-97	Actual Expenditure					Eighth Plan Expenditure	1997-98 (R.E.)
		1992-93	1993-94	1994-95	1995-96	1996-97		
1	2	3	4	5	6	7	8	9
A. Exploration & Production	**20000**	**4726**	**6148**	**6511**	**5386**	**4911**	**29682**	**5899**
1. ONGC	17511	4249	7722	6004	4250	3973	26198	4406
2. OIL	1063	265	311	295	331	353	1555	412
3. GAIL	1426	212	115	212	805	585	1929	1081
B. Refining & Marketing	**4000**	**972**	**1442**	**2133**	**2737**	**3097**	**10381**	**5016**
1. IOC	2404	366	673	1537	2079	1604	6259	1807
2. BPCL	130	55	75	48	131	226	535	730
3. HPCL	380	171	229	202	185	570	1357	1155
4. MRL	266	201	137	43	20	35	436	173
5. CRL	436	86	155	86	54	103	484	81
6. BRPL	200	42	75	63	35	21	236	9
7. Lubrizol India Ltd.	30	5	11	16	5	1	38	2
8. Engineers India Ltd.	15	4	7	2	3	6	22	7
9. IBP Co. Ltd.	139	42	47	31	35	117	272	252
10. Numaligarh Refinery	0	0	33	105	190	414	742	800
C. Petrochemicals	**2427**	**83**	**161**	**256**	**606**	**766**	**1872**	**551**
1. BRPL	47	3	7	4	8	12	34	41
2. BPCL	250	1	2	7	19	0.5	29.5	2
3. CRL	400	9	3	10	0	0	22	N
4. MRL	190	3	2	1	N	0	6	106
5. HPCL	40	8	1	0	0	N	9	0
6. GAIL	1200	51	133	218	575	752	1729	394
7. IOC	300	8	13	16	4	2	43	8
D. Engineering								
1. IBP Co. Ltd. & Others	125	17	10	22	26	27	102	94
Grand Total (A+B+C+D)	26552	5798	9761	8922	8755	8801	42037	11560

N: Negligible. RE = Revised Estimates.

2. EIGHTH PLAN CRUDE OIL PRODUCTION PROFILE

(Mn. Tonnes)

Company/areas	1992-93	1993-94	1994-95	1995-96	1996-97	1992-97
1	2	3	4	5	6	7
A. ONGC						
1. ONSHORE						
Cambay	6.79	7.33	7.80	8.87	8.87	38.97
Assam	3.35	3.76	4.14	4.47	4.72	20.44
Cauvery	0.30	0.35	0.50	0.50	0.50	2.16
K.G.	0.03	0.04	0.04	0.04	0.04	0.20
TOTAL ONSHORE	**10.47**	**11.48**	**12.48**	**13.19**	**14.13**	**61.77**
2. OFF SHORE						
Bombay	14.96	16.88	27.38	27.94	28.06	115.21
K.G.	0.11	0.14	1.09	1.21	1.19	3.37
TOTAL OFF SHORE	**15.07**	**17.02**	**28.47**	**29.15**	**29.15**	**118.96**
TOTAL ONGC	**25.54**	**28.50**	**10.95**	**42.35**	**43.35**	**180.73**
B. OIL						
Assam	2.82	3.00	3.25	3.30	3.50	15.87
Arunachal Pradesh	0.10	0.12	0.15	0.15	0.20	0.72
TOTAL OIL	**2.92**	**3.12**	**3.40**	**3.45**	**3.70**	**16.59**
GRAND TOTAL (A+B)	**28.46**	**31.62**	**44.35**	**45.80**	**47.08**	**197.32**
ACTUAL	**(26.95)**	**(27.03)**	**(32.23)**	**(35.17)**	**(32.90)**	**(154.28)**

Note: The NGL production is included in the total crude oil Production.
Source: Draft Report-Eighth Five Year Plan.

3. EIGHTH PLAN NATURAL GAS PRODUCTION PROFILE

(Bn.-Cubic Metres)

Company/areas	1992-93	1993-94	1994-95	1995-96	1996-97	1992-97
1	2	3	4	5	6	7
A. ONGC						
1. ONSHORE						
Cambay	2.35	2.76	2.98	4.03	4.09	16.21
Assam	0.93	1.05	1.19	1.23	1.28	5.68
Cauvery	0.06	0.07	0.09	0.09	0.09	0.40
K.G.	0.93	1.14	1.11	0.85	0.87	4.90
Tripura	0.10	0.13	0.29	0.46	0.47	1.45
TOTAL ONSHORE	**4.37**	**5.15**	**5.66**	**6.66**	**6.80**	**28.64**
2. OFF SHORE						
Bombay	13.31	13.52	18.09	20.80	20.80	86.52
K.G.	0.01	0.01	0.10	0.36	0.34	0.82
TOTAL OFF SHORE	**13.32**	**13.53**	**18.19**	**21.16**	**21.14**	**87.34**
TOTAL ONGC	**17.69**	**18.68**	**23.85**	**27.82**	**27.94**	**115.98**
B. OIL						
Assam & Arunachal Pradesh	1.59	1.69	1.89	2.03	2.24	9.44
GRAND TOTAL (A+B)	**19.28**	**20.37**	**25.74**	**29.85**	**30.18**	**125.42**
ACTUAL	**(18.06)**	**(18.34)**	**(19.38)**	**(22.31)**	**(22.79)**	**(100.88)**

Source: Draft Report-Eighth Five Year Plan.

4. TARGETS FOR EXPLORATION ACTIVITY IN EIGHTH PLAN (1992-97)

(1)	Unit (2)	ONGC (3)	OIL (4)	TOTAL (5)
1. Geological and Gravimagnetic Survey		Sq. km (..... R & D Work.....)		
2. Seismic Surveys (SLK)				
Onland	'000' Sq. Km.	120	20	140
Offshore	'000' Sq. Km.	129		129
Total	'000' Sq. Km.	249	20	269
3. Exploratory Drilling				
Onland	'000' Metres	2053	209	2262
Offshore	'000' Metres	768	12	780
Total	'000' Metres	2821	221	3042
4. Development Drilling				
Onland	'000' Metres	2707	497	3204
Offshore	'000' Metres	605		605
Total	'000' Metres	3312	497	3809

Source: Eighth Five Year Plan Document.

5. TARGETS FOR OIL SECTOR DURINGTERMINALYEAR OF EIGHTH PLAN AND ACTUALS FOR 1992-93TO 1996-97

Items	Unit	1992-93 (Actual)	1993-94 (Actual)	1994-95 (Actual)	1995-96 (Actual)	1996-97 (Target)	1996-97 (Actual)
1	2	3	4	5	6	7	8
1. Production of Crude Oil							
(i) On Shore	Mn. Tonnes	11.20	11.65	12.01	12.04	17.83	12.22
(ii) Off Shore	"	15.75	15.38	20.23	23.13	29.25	20.68
Total	"	26.95	27.03	32.24	35.17	47.08	32.90
2. Production of Natural Gas							
(i) On Shore	Bn. Cub. Mtrs.	4.71	4.98	5.24	5.73	9.04	6.00
(ii) Off Shore	"	13.35	13.36	14.14	16.58	21.14	16.79
Total	"	18.06	18.34	19.38	22.31	30.18	22.79
3. Refining							
(i) Refining capacity (at year end)	Mn. Tonnes	52.75	53.40	56.40	60.40	73.55	61.55
(ii) Crude throughput	"	53.48	54.30	56.53	58.74	65.12	62.87
(iii) Production of Pol Products	"	50.36	51.08	52.93	55.08	61.20	59.01
4. Net Imports							
(a) Qty.: Crude Oil	Mn. Tonnes	29.25	30.82	27.35	27.34	N.A.	33.91
Pol. Products	"	7.56	8.04	10.70	16.90	N.A.	17.10
(b) Value : Crude oil and Pol Products	Rs. crores	15439	16221	16250	22263	N.A.	32092
TOTAL	"	**36.81**	**38.86**	**28.05**	**44.24**	**N.A.**	**51.01**
5. Demand of Pol. products.	Mn. Tonnes	58.90	60.81	65.49	72.52	79.37	77.2
6. LPG							
(i) Production	Mn. Tonnes	2.57	2.70	2.86	3.25	2.06$	3.38
(ii) No. of consumers at year end	Million	19.22	20.73	23.14	25.7	31.7	29.3

Source: Draft Report; Eighth Five Year Plan.
$: LPG production from Natural Gas.

6. DEMAND FOR PETROLEUM PRODUCTS

Items	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9
Demand for Petroleum Products (MMT)	54.10	55.04	56.97	58.90	60.81	67.37	74.67	79.16
Annual Growth Rate%	8.0	1.7	3.5	3.4	3.2	10.8	10.8	6.0
Share of Middle Distillates (%)	60.0	60.2	60.4	61.4	62.7	60.8	60.9	61.5

Source : VIIIth Five Year Plan Document.

7. IMPORT AVAILABILITY RATIOS OF CRUDE OIL & PETROLEUM PRODUCTS

(Million tonnes)

Items	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7	8	9
A. CRUDE OIL								
(i) Production	34.09	33.02	30.34	26.95	27.03	32.24	35.17	32.90
(ii) Imports	19.49	20.70	23.99	29.25	30.82	27.35	27.34	33.91
(iii) Availability (Net)	53.58	53.72	54.33	56.20	57.85	59.59	62.51	66.81
(iv) Item (ii) as % of Item (iii)	36.38	38.53	44.16	52.05	53.28	45.90	43.74	50.76
B. PETROLEUM PRODUCTS								
(i) Production†	49.46	49.49	49.59	51.68	52.47	54.35	56.80	60.79
(ii) Imports	6.56	8.66	9.45	11.28	12.08	13.95	20.34	20.26
(iii) Availability (Gross)	56.02	58.15	59.03	62.96	64.55	68.30	77.14	81.05
(iv) Item (ii) as % of Item (iii)	11.71	14.89	16.00	17.92	18.71	20.42	26.37	25.00

† Includes LPG Production from Natural Gas.

8. VALUE* OF CRUDE OIL & POL PRODUCTS IMPORTED DURING V, VI, VII AND VIII FIVE YEAR PLAN PERIODS

PLAN/ PERIOD	VALUE* (Rs./Crores)
(1)	(2)
Vth Plan (1974-79)	6977
VIth Plan (1980-85)	21388
VIIth Plan (1985-90)	19585
Annual Plan (1990-91)	9775
Annual Plan (1991-92)	11824
VIIIth Plan (1992-97)	102265

*Net of POL Imports.

PART-IV
FINANCIAL PERFORMANCE/STRUCTURE
(163-196)

PART-IV
FINANCIAL PERFORMANCE/STRUCTURE
(163-196)

1. CAPITAL INVESTMENT

The Capital investment defined as the sum of paid-up capital and loans has increased by 27.61% from Rs. 26146.05 crores in 1995-96 to Rs. 33364.96 crores in 1996-97. The increase in the capital investment in 1996-97 was on account of increase in loans from Rs. 22504.26 crores to Rs. 29641.54 crores. The paid up capital has also increased from Rs. 3641.79 crores in 1995-96 to Rs. 3722.46 crores in 1996-97. The position of changes in paid up capital aand total loans is as under:-

PAID UP CAPITAL

(Rs./Crores)

Sl. No.	Name of the Undertaking	1995-96	1996-97	%increase decrease
1.	Oil and Natural Gas Commission	142592	142592	0.00
2.	Oil India Limited	7133	14267	100.01
3.	Indian Oil Corporation Limited	38925	38927	0.00
4.	Bharat Petroleum Corporation Ltd.	15000	15000	0.00
5.	Madras Refinery Limited	14361	14361	0.00
6.	Hindustan Petroleum Corporation Limited	20695	20855	0.77
7.	IBP Company Limited	1476	2215	50.07
8.	Balmer Lawrie & Company Limited	1629	1629	0.00
9.	Engineers India Limited	1800	1800	0.00
10.	Biecco Lawrie Limited	4200	4200	0.00

LOANS

(Rs./Crores)

Sl. No.	Name of the Undertaking	1995-96	1996-97	%increase decrease
1.	Oil & Natural Gas Commission	1207034	1067018	-11.60
2.	Oil India Limited	22662	19838	-12.46
3.	Gas Authority of India Ltd.	80206	83454	4.05
4.	Indian Oil Corporation Ltd.	687036	1315629	91.49
5.	Bharat Petroleum Corporation Ltd.	52410	136081	159.65
6.	Madras Refinery Ltd.	73911	93702	26.78
7.	Hindustan Petroleum Corporation Ltd.	44573	141121	216.61
8.	IBP Co. LTD	31472	44476	41.32
9.	Cochin Refineries Ltd.	28265	30783	8.91
10.	Indian Oil Blending Ltd.	0	0	0.00
11.	Lubrizol India LTD	0	2546	0.00
12.	Bongaigaon Refineries & Petrochemicals	8082	7363	-8.90
13.	Balmer Lawrie & Co. LTD	8662	16069	85.51
14.	Engineers India Ltd.	1162	951	-18.16
15.	Biecco Lawrie Ltd.	0	0	0.00
16.	ONGC-V	2770	7670	176.90

The position of the foreign loans during three years 1994-95, 1995-96, 1996-97 is given below:—

FOREIGN LOANS

(Rs./Crores)

Sl. No.		1994-95	1995-96	1996-97
1.	Foreign Loans	16619.75	1772106	1960016.77
2.	Total Loans	22116.15	2250426	3203642.07
	% of Foreign Loan to Total Loan	75.15	78.75	61.18

The total loans to net worth ratio of all undertakings together increased from 0.63 in 1995-96 to 0.70 in 1996-97.

CAPITAL EMPLOYED

Capital employed defined as the sum of net fixed assets (net block) and working capital (excluding capital work in progress and capital goods) increased from Rs. 45062.70 crores in 1995-96 to Rs. 55176.69 crores in 1996-97. This was on account of the increase in net fixed assets from Rs. 32983. 10 crores in 1995-96 to Rs. 36676.54 crores in 1996-97. The working capital has also increased from Rs. 12079.00 crores to Rs. 19522.35 crores during the same period. Details of changes in Capital employed is given below:—

(A) NET FIXED ASSETS

(Rs./Crores)

Sl. No.	Name of the Undertakings	1995-96	1996-97	% increase/ Decrease
1	Oil & Natural Gas Commission	20699.44	21047.26	1.68
2.	Oil India Limited	1181.94	1356.74	14.79
3.	Gas Authority of India Ltd.	1259.04	2083.34	65.47
4.	Indian Oil Corporation Ltd.	4395.26	6021.68	37.00
5.	Bharat Petroleum Corporation Ltd.	1518.65	1793.59	18.10
6.	Madras Refinery Ltd.	905.26	872.63	-3.60
7.	Hindustan Petroleum Corporation Ltd.	1676.39	2003.63	19.52
8.	.IBP Co. LTD	204.74	257.52	25.78
9.	Cochin Refineries ltd.	568.68	614.88	8.12
10.	Indian Oil Blending Ltd.	15.62	23.80	52.37
11.	Lubrizol India Ltd.	79.06	76.82	-2.83
12.	Bongaigaon Refineries & Petrochemicals Ltd.	349.86	358.80	2.56
13.	Balmer Lawrie & Co. LTD	79.79	85.79	7.52
14.	Engineers India Ltd.	46.93	48.25	2.81
15.	BieccoLawrie Ltd.	233	746	220.17
16.	ONGC-V	11	20	81.82

(B) WORKING CAPITAL

(Rs./Crores)

Sl. No.	Name of the Undertaking	1995-96	1996-97	% increase decrease
1.	Oil & Natural Gas Commission	452800	515588	13.87
2.	Oil India Limited	48501	47034	-3.02
3.	Gas Authority of India Ltd.	-45773	-1246	-97.28
4.	Indian Oil Corporation Ltd.	458059	906516	97.90
5.	Bharat Petroleum Corporation Ltd.	44404	97713	120.05
6.	Madras Refinery Ltd.	49020	76206	55.46
7.	Hindustan Petroleum Corporation Ltd.	94917	196239	106.75
8.	IBP Co. LTD	15957	21413	34.19
9.	Cochin Refineries Ltd.	23568	22827	-3.14
10.	Indian Oil Blending Ltd.	1356	1470	8.41
11.	Lubrizol India Ltd.	6168	8402	36.22
12.	Bongaigaon Refineries & Petrochemicals	16447	15622	-5.02
13.	Balmer Lawrie & Co. Ltd.	13597	11290	-16.97
14.	Engineers India Ltd.	23394	29530	26.23
15.	Biecco Lawrie Ltd.	1668	1109	-33.51
16.	ONGC-V	3877	2523	-34.92

SALES TURNOVER

The sales turnover of all the Undertakings clubbed together increased by 23.12% from Rs. 94137.66 crores in 1995-96 to Rs. 115906.19 crores in 1996-97. The company wise share of sales turnover showing the amount is as under:—

(Rs./Crores)

Sl. No.	Name of the Undertaking	1995-96	% Share	1996-97	% Share
1.	ONGC	13110.51	13.47	13235.49	11.31
2.	OIL	971.26	1.00	1041.29	0.89
3.	GAIL	4190.84	4.30	4322.86	3.69
4.	IOC Ltd.	43861.85	45.06	62073.57	53.02
5.	BPCL	9253.79	9.51	10553.55	9.02
6.	MRL	2197.95	2.26	2493.19	2.13
7.	HPCL	11866.27	12.19	13941.44	11.91
8.	IBP Co. Ltd.	3259.77	3.35	2154.75	1.84
9.	CRL	3383.56	3.48	3917.75	3.35
10.	IOBL	3245.00	3.33	32.65	0.03
11.	LIL	348.14	0.36	365.36	0.31
12.	BRPL	811.58	0.83	838.57	0.72
13.	BLCL	470.89	0.48	546.2	0.47
14.	EIL	259.98	0.27	274.52	0.23
15.	BLL	118.82	0.12	114.99	0.10
16.	ONGC-V	0.00	0.00	0.00	0.00
17.	MRPL	—	—	1159.47	0.99
		97350.21	**100.00**	**117065.65**	**100.00**

PROFITABILITY

The adjusted gross profit which stood at Rs. 5896.54 crores during the year 1995-96 increased to Rs. 7038.47 crores in 1996-97. The adjusted gross profit expressed as a percentage of sales turnover decrease from 6.26% in 1995-96 to 6.07% in 1996-97*. *The return on Capital employed decreased from 18.88% to 15.62%. The net profit, however, increased from 5250.09 crores in 1995-96 to Rs. 5603.51 crores in 1996-97. The net profit expressed as a percentage of paid-up Capital increased from 144.16% in 1995-96 to 150.53% in 1996-97 while that of net profit to net worth decreased from 14.65% to 13.31%.

DIVIDENDS

There has been an increase in the quantm of dividends paid by the Public Sector Undertakings over the three years. The total dividend increased from Rs. 686.16 crores in 1995-96 to Rs. 823.67 crores in 1996-97. The highest amount of dividend was paid by Oil & Natural Gas Corporation Ltd. which paid Rs. 285.19 crores in 1995-96. The Indian Oil Corporation Limited paid a dividend of Rs. 155.74 crores in 1996-97. ONGC Videsh Ltd. did not declare any dividend during the year under review.

CORPORATE TAX

The contribution made to the National Exchequer by the Public Sector Undertakings by way of Corporate taxes was Rs. 1909.46 crores in 1996-97 as against Rs. 1789.50 crores in 1995-96.

(A) EXPLORATION & PRODUCTION

This category includes the following four enterprises and the data in respect of each undertakings is given in Table.

1.	Oil & Natural Gas Corporation Ltd.	(ONGC)
2.	ONGC Videsh Limited	(ONGC-V)
3.	Oil India Limited	(OIL)
4.	Gas Authority of India Limited	(GAIL)

Summary position of these undertakings for three years is as under:—

(Rs./Crores)

	Particulars	1994-95	1995-96	1996-97
1.	Paid up Capital	1291.24	2372.57	2444.24
2.	Loans	14090.55	13126.72	11779.79
3.	Net worth	18813.10	21526.26	24690.16
4.	Capital Employed	24341.96	27734.58	28917.45
4.1	Net fixed Asset	19366.31	23140.53	24487.54
4.2	Working Capital	4975.65	4594.05	5638.98
5.	Sales Turnover	16118.07	18272.61	18599.64
6.	Adjusted Gross Profit	2870.64	3650.44	4017.89
7.	Net Profit	2558.00	2666.41	2801.63
8.	Dividend Paid	136.26	307.19	449.40
9.	Corporate Tax	101.93	552.86	829.33

The salient points of analysis are given as under:—

1. CAPITAL INVESTMENT

There has been a decrease of 8.65% in the capital investment from Rs 15499.29 crore in 1995-96 to Rs 14224.03 in 1996-97. The decrease in the capital on account of decrease in the loans of the undertakings noted below:—

(Rs./Crores)

	PARTICULARS	1995-96	1996-97	% increase/ decrease
	(A) PAID-UP CAPITAL			
1	Oil India Limited	71.33	142.67	100.01
2	Gas Authority of India Limited	845.32	845.65	0.04
	(B) LOANS			
1	Oil & Natural Gas Commission	12070.34	10670.18	-11.60
2	ONGC-V	27.70	76.70	176.90
3	Oil India Limited	226.62	198.38	-12.46
4	Gas Authority of India	802.06	834.54	4.05

2. CAPITAL EMPLOYED

The capital employed registered an increase of 4.26% from Rs 27734.58 crores in 1995-96 to Rs 28917.54 crores in 1996-97. The increase in capital employed comprised of the increase in the Net Fixed Assets and Working Capital as under:—

(Rs/Crores)

PARTICULARS		1995-96	1996-97	% increase/ decrease
	(A) NET FIXED ASSETS			
1	Oil & Natural Gas Commission	20699.44	21047.26	1.68
2	Gas Authority of India Ltd.	1259.04	2083.34	65.47
3	Oil India Limited	1181.94	1356.74	14.79
4	ONGC-V	0.11	0.20	81.82
	(B) WORKING CAPITAL			
1	Oil & Natural Gas Commission	4528.00	5155.88	13.87
2	Gas Authority of India Ltd.	-457.73	-12.46	-97.28
3	Oil India Limited	485.01	470.34	-3.02
4	ONGC-V	38.77	25.23	-34.92

3. SALES TURNOVER:

The sales turnover under this category increased from Rs 18272.61 crores in 1995-96 to Rs 18599.64 crores in 1996-97 showing an increase of 1.79%. The sales of Oil & Natural Gas Commission went up from Rs. 13110.51 crores in 1995-96 to Rs 13235.49 in 1996-97 and that of GAIL increased from Rs 4190.84 to Rs 4322.86 in the same period. The sales turonver of Oil India Limited increased from Rs 971.26 crores to Rs 1041.29 crores during the same period.

4. PROFITABILITY:

The adjusted gross profit increased by 10.07% from Rs. 3650.44 crores in 1995-96 to Rs 4017.89 in 1996-97. The gross profit expressed as a percentage of sales turnover decreased from 19.98% in 1995-96 to 21.60% in 1996-97. The ratios of net profit to paid-up capital and net worth were 114.62% and 11.35% in 1996-97 against 112.38% and 12.39% respectively in 1995-96.

5. DIVIDEND

ONGC and OIL have been paying dividend continuosly, GAIL joined the dividend paying companies in 1992-93. The dividend paid by the companies under this group during 1996-97 was Rs. 449.40 crores against Rs. 307.19 crores paid during 1995-96.

6. CORPORATE TAX

The contriubution made by companies of this group by way of taxes to the national exchequer has increased from Rs. 552.86 crores in 1995-96 to Rs. 829.33 crores in 1996-97.

(B) REFINING AND MARKETING

Financial structure and performance of the individual undertakings have been provided in the Table. Summary position of the undertaking for three years is as under:—

(Rs./Crores)

	Particulars	1994-95	1995-96	1996-97
1.	Paid up Capital	958.06	993.11	1002.11
2.	Loans	8757.42	9198.48	17617.91
3.	Net worth	10974.63	13393.87	16340.62
4.	Capital Employed	11266.92	16298.15	25140.87
4.1	Net fixed Asset	7162.35	9363.66	11688.68
4.2	Working Capital	4050.68	6934.49	13307.85
5.1	Sales Turnover	53009.48	74203.78	95532.26
5.2	Other Income	800.24	3492.33	1292.81
	Total	**53809.72**	**77696.11**	**96825.07**
6.	Adjusted Gross Profit	2360.23	2087.18	2901.83
7.	Net Profit	1944.30	2407.82	2689.24
8.	Dividend Paid	253.92	342.21	363.93
9.	Corporate Tax	715.58	1170.26	1032.85

An analysis of salient features is given below:—

1. CAPITAL INVESTMENT

During the year the capital investment increased by 82.95% from Rs. 10191.59 crores in 1995-96 to Rs. 18645.48 crores in 1996-97. The increase was mainly due to increase in loans. However, the paid up capital of the companies under this group has also increased by 0.90% from Rs. 993.11 crores in 1995-96 to Rs. 1002.11 crores in 1996-97. The details of changes in the paid up capital and total loans of the companies under this group are given below:—

(Rs./Crores)

	PARTICULARS	1995-96	1996-97	%increase/ decrease
	(A) PAID-UP CAPITAL			
1.	IOC	38925	38927	0.01
2.	HPCL	20695	20855	0.77
3.	IBP	1476	2215	50.07
	(B) LOANS			
1.	IOC	6870.36	13156.29	91.49
2.	BPCL	524.10	1360.81	159.65
3.	HPCL	445.73	1411.21	216.61
4.	CRL	282.65	307.83	8.91
5.	MRL	739.11	937.02	26.78
6.	IBP	314.72	444.76	41.32
7.	LIL	21.81	25.46	16.74

The total loans to net worth of the companies under the refining group has increased from 0.69 in 1995-96 to 1.08 in 1996-97.

2. CAPITAL EMPLOYED

The capital employed in the Refining and Marketing category increased by 54.26% from Rs. 16298.15 crores in 1995-96 to Rs. 25140.87 crores in 1996-97. This was due to singnificant increase in working capital from Rs. 6934.49 crores to Rs. 13307.85 crores during the period. The net fixed assets increased from Rs. 9363.66 crores to Rs. 11688.68 crores in the same period.

3. SALES TURNOVER

The sales turnover of the companies under this category has increased by 28.74% from Rs. 74203.78 crores to Rs. 95532.26 in the same period. The details of sales turnover in respect of major companies under this category are as under:—

(Rs./Crores)

	PARTICULARS	1995-96	1996-97	%increase/ decrease
1.	IOC	28457.90	43861.85	62073.57
2.	BPCL	10417.26	9253.79	10553.55
3.	HPCL	7590.43	11866.27	13941.44
4.	CRL	2173.18	3383.56	3917.75
5.	MRL	2440.34	2197.95	2493.19
6.	IBP	1599.12	3259.77	2154.75

4. PROFITABILITY

The %age of adjusted gross profit to sales turnover was 3.04% during 1996-97 as against 2.81% in 1995-96. The adjusted gross profit and net profits were Rs. 2901.83 crores and Rs. 2689.24 crores in 1996-97 against Rs. 2087.18 crores and Rs. 2407.82 crores respectively in 1995-96. The return on captial employed which was 27.07% druing 1995-96 decreased to 17.47% in 1996-97. The net profit to paid up captial and net profit to net worth were 268.35% and 16.46% in 1996-97 against 242.45% and 18.02% respectiveldy in 1995-96.

5. DIVIDEND

During 1996-97, the companies under Refining and Marketing paid out Rs. 363.93 crores as dividend as against Rs. 342.21 crores in 1995-96. The amount paid in 1994-95 was Rs. 253.92 crores. IOC paid out the highest dividend amounting to Rs. 155.74 crores followed by HPCL amounting to Rs. 91.90 crores.

6. CORPORATE TAX

The taxes paid by this group of companies was Rs. 1032.85 crores in 1996-97 against Rs. 1170.26 crores in 1995-96.

(C) PETRO-CHEMICAL

There is only one undertaking in this category i.e., Bongaigaon Refinery & Petrochemicals Ltd.

The financial structure and performance for three years is as under:—

(Rs./Crores)

	Particulars	1994-95	1995-96	1996-97
1.	Paid up Capital	199.82	199.82	199.82
2.	Loans	83.41	80.82	73.63
3.	Net worth	446.29	455.84	528.48
4.	Capital Employed	322.73	514.33	515.02
4.1	Net fixed Asset	195.14	349.86	358.80
4.2	Working Capital	127.59	164.47	156.22
5.1	Sales Turnover	730.21	811.58	9.06
6.	Adjusted Gross Profit	2360.23	2087.18	27.85
7.	Net Profit	1944.30	2407.82	29.07
8.	Dividend Paid	253.92	342.21	8.72
9.	Corporate Tax	715.58	1170.26	2.35

The analysis of the salient features is as under:—

1. CAPITAL INVESTMENT

The captial investment decreased from Rs. 280.64 crores in 1995-96 to Rs. 273.45 crores in 1996-97. This is due to decrease in loans from Rs. 80.82 crores in 1995-96 to Rs. 73.63 crores in 1996-97. The total loans to net worth ratio of the sector during 1996-97 has decreased from 0.18 in 1995-96 to 0.14 in 1996-97.

2. CAPITAL EMPLOYED

The capital employed increased by 0.13% from Rs. 514.33 crores in 1995-96 to Rs. 515.02 crores in 1996-97. The increase in capital employed was due to 2.56% increase in the increase in net fixed assets of the sector as compared to those in 1995-96.

3. SALES TURNOVER

The Sales turnover decreased by 98.88% from Rs. 811.58 crores in 1995-96 to Rs. 9.06 crores in 1996-97.

4. PROFITABILITY

The % age of adjusted gross profit to sales turnover stood at 3.32% in 1996-97 as against 6.89% in 1995-96. The return on capital employed decreased from 10.87% to 8.08% to the same period. The net profit to paid up capital and net profit to net worth were 14.55% in 1996-97 against 45.12% and 19.78% respectively in 1995-96.

5. DIVIDEND

The dividend paid by this sector is 8.72 during 1996-97 as against 27.05 crores in 1995-96.

6. CORPORATE TAX

The sector paid a corporate tax of Rs. 2.35 crores in 1996-97 as against Rs. 24.96 crores in 1995-96.

(D) ENGINEERING UNITS

There are at present 3 undertakings under this category, which are:—

1. Engineers India Limited (EIL)
2. Balmer Lawrie & Co. Limited (BLCL)
3. Biecco lawrie Limited (BLL)

The consolidated position of the three companies has been given in Table No. 19 while those of the individual companies have been provided in Table No. 20 to 22:—

(Rs./Crores)

	Particulars	1994-95	1995-96	1996-97
1.	Paid up Capital	76.29	76.29	76.29
2.	Loans	142.83	98.24	170.20
3.	Net worth	386.36	467.34	535.30
4.	Capital Employed	394.75	515.64	603.33
4.1	Net fixed Asset	109.75	129.05	141.50
4.2	Working Capital	285.00	386.59	419.29
5.1	Sales Turnover	638.31	849.69	935.71
6.	Ajusted Gross Profit	98.84	102.99	90.90
7.	Net Profit	76.49	85.71	83.56
8.	Dividend Paid	8.21	9.71	10.61
9.	Corporate Tax	48.18	41.42	44.92

2649/P&NG/F—13-A

1. CAPITAL INVESTMENT

The Capital Investment under this category increased by 41.23% from Rs. 174.53 crores in 1995-96 to Rs. 246.49 crores in 1996-97. This was due to 73.25% increase in total loans. However, the paid up capital of the companies under this category remain unchanged during the period.

The details of the changes in Paid up captial and loans are given below:—

(Rs. Crores)

Sl. No.	Name of the Company	1995-96	1996-97	%increase/ decrease
	(A) PAID UP CAPITAL			
1.	Balmer Lawrie & Company Ltd.	16.29	16.29	0.00
2.	Biecco Lawrie Ltd.	42.00	42.00	0.00
3.	Engineers India Ltd.	18.00	18.00	0.00
	(B) LOANS			
1.	Balmer Lawrie & Company Ltd.	86.62	160.69	85.51
2.	Biecco Lawrie Ltd.	11.62	9.51	-18.16
3.	Engineers India Ltd.	0.00	0.00	0.00

The total loans/net worth ratio has improved from 0.21 in 1995-96 to 0.32 during 1996-97 due to increase in net worth.

2. CAPITAL EMPLOYED

The capital employed by the engineering units increased by 17.01% from Rs. 515.64 crores in 1995-96 to Rs. 603.33 crores in 1996-97. The corresponding increase in the preceding year was 17.9%. The net fixed assets and working capital of the companies under this category was as under:—

(Rs. Crores)

Sl. No.	Name of the Company	1995-96	1996-97	%increase/ decrease
	(A) NET FIXED ASSETS			
1.	Balmer Lawrie & Company Ltd.	79.79	85.79	7.52
2.	Biecco Lawrie Ltd.	2.33	7.46	220.17
3.	Engineers India Ltd.	46.93	48.25	2.81
	(B) WORKING CAPITAL			
1.	Balmer Lawrie & Company Ltd.	135.97	112.9	-16.97
2.	Biecco Lawrie Ltd.	16.68	11.09	-33.51
3.	Engineers India Ltd.	233.94	295.30	26.23

3. SALES TURNOVER

The sales turnover of the Undertakings in this category increased from Rs. 849.69 crores in 1995-96 to Rs. 935.71 crores in 1996-97. The sales during the preceding year has increased by 11.6%. The ratio of adjusted gross profit to sales decreased from 12.12% to 9.71% in the same period.

4. PROFITABILITY

The adjusted gross profit has decreased from Rs. 102.99 crores in 1995-96 to Rs. 90.90 crores in 1996-97. The ratio of net profit to paid up capital decreased from 112.35% to 109.54% in the period and the ratio of net profit to net worth decreased from 18.34% to 15.61% in the same period.

5. DIVIDEND

The companies under this category paid a dividend of Rs. 10.61 crores in 1996-97 as against Rs. 9.71 crores in 1995-96.

6. CORPORATE TAX

The contribution made by the companies to National Exchequer by way of taxes was Rs. 44.92 crores in 1996-97 as against Rs. 41.42 crores in 1995-96.

2649/P&NG/F—13-B

2. CONSOLIDATED FINANCIAL STRUCTURE

Year: 1996-97
(Rs. Lakhs)

ITEM	Exploration and Production	Refining and Marketing	Petro-chemi-cals.	Engineering & other Serv. Units	Total
1. Authorised Capital	1630000	329460	20000	13000	1992460
2. i) Paid-up Capital	244424.12	100211.57	19982	7629	372246.7
ii) Preference Capital	0	0	0	0	0
iii) Reserves & Surpluses	2236734.1	1539952.38	32904	49145.8	3858737
3. i) Total loans	1177979.9	1761791.47	7363	17020	2964154
ii) of which Foreign	996788.03	903665.1	0	0	1900453
4. Cash credits/advances from banks/others	21374	644953.7	1143	4675.42	672146.6
5. Net worth	2469016.6	1634062.61	52848	53530.41	4209458
6. i) Gross Block	5543236.6	2049718.41	68479	22263.62	7683698
ii) Less Depreciation	3094482.4	883352.22	32599	8113.41	4018547
iii) Net fixed assets	2448754.2	1168869.89	35880	14150.21	3667654
iv) Working Capital	563898.58	1330785.72	15622	41929.06	1952235
v) Capital Employed (iii + iv)	2891745.6	2514087.68	51502	60333.27	5517669
7. i) Sales	1859964	9553226.65	83857	93571.32	11590619
ii) other income	116757	129281.73	906	6127	253071.7
TOTAL	1976721	9682508.38	84763	99698.32	11843690
8. i) Total emoluments (incl. perks)	109487	117016.92	3565	18050.99	248120.3
ii) of which bonus	3378.3	3742	89	65.43	7274.58
iii) Average Emol. per person	7.15	1.74	2	2.26	2.69
9. Inventories	224831.88	857715.31	14907	7378.05	1104832
10. Gross profit					
a) Gross Profit before Intt. & Tax	402984.05	439237.42	4163	15517.75	861901.9
b) Adjusted gross profit	401789.57	290183	2785	9090	703847.6
11. Net Profit					
a) Net Profit after intt. & taxes	280163.76	268924.59	2907	8356.49	560351.9
b) Adjusted net profit	278161	168903	1530	2234	450828
12. Dividends declared	44940.54	36393.57	872	1061	83267.23
13. Corporate Tax	82933	103285.98	235	4492	190946
% age of					
a) NP to paid-up capital	114.62	268.36	14.55	109.54	150.53
Adj. NP to paid-up capital	113.80	168.55	7.66	29.28	121.11
b) NP to Net Worth	11.35	16.46	5.50	15.61	13.31
Adj. NP to Net Worth	11.27	10.34	2.90	4.17	10.71
c) GP to Capital Employed	13.94	17.47	8.08	25.72	15.62
Adj. GP to Capital Employed	13.89	11.54	5.41	15.07	12.76
d) Sales to Capital Employed	64.32	379.99	162.82	155.09	210.06
e) GP to Sales	21.67	4.60	4.96	16.58	7.44
Adj. GP to Sales	21.60	3.04	3.32	9.71	6.07
f) Loans/Net Worth Ratio	0.48	1.08	0.14	0.32	0.70

3. CONSOLIDATED FINANCIAL STRUCTURE

Year: 1995-96
(Rs. Lakhs)

	ITEM	Exploration and Production	Refining and Marketing	Petro-chemi-Cals.	Engineering & other Serv. Units	Total
1.	Authorised Capital	1630000	326960	20000	13000	1989960
2.	i) Paid-up Capital	237257	99311	19982	7629	364179
	ii) Preference Capital	0	0	0	0	0
	iii) Reserves & Surpluses	2007035	1303409.3	30957	41778	3383179.3
3.	i) Total loans	1312672	919848	8082	9824	2250426
	ii) of which foreign	1178042	596721	0	0	1774763
4.	Cash credits/advances from banks/others	6251	256429	1674	8091	272445
5.	Net worth	2152626	1336198	45584	46734	3581142
6.	i) Gross Block	5019791	1674074	65850	19876	6779591
	ii) Less Depreciation	2705739	739548	30864	6971	3483122
	iii) Net fixed assets	2314052	936366	34986	12905	3298309
	iv) Working Capital	459405	693449	16447	38659	1207960
	v) Capital Employed (iii + iv)	2773457	1629815	51433	51564	4506269
7.	i) Sales	1827261	7420378	81158	84969	9413766
	ii) other income	54113	349233	992	5615	409953
	TOTAL	1881374	7769611	82150	90584	9823719
8.	i) Total emoluments (incl. perks)	141316	120800	3960	16222	282298
	ii) of which bonus	4045	1993	192	96	6326
	iii) Average Emol. per person	11.5	1.91	2.07	2.17	3.32
9.	Inventories	201102	719443	14528	8808	943881
10.	Gross profit					
	a) Gross Profit before Intt. & Tax	381375	441251	13098	15062	850786
	b) Adjusted Gross profit	365044	208718	5593	10299	589654
11.	Net Profit					
	a) Net Profit after intt. & taxes	266641	240782	9015	8571	525009
	b) Adjusted net profit	302919	130987	2706	4279	440891
12.	Dividends declared	30719	34221	2705	971	68616
13.	Corporate Tax	55286	117026	2496	4142	178950
	% age of					
	a) NP to paid-up capital	112.38	242.45	45.12	112.35	144.16
	Adj. NP to paid-up capital	127.68	131.90	13.54	56.09	329.20
	b) NP to Net Worth	12.39	18.02	19.78	18.34	68.52
	Adj. NP to Net Worth	14.07	9.80	5.94	9.16	38.96
	c) GP to Capital Employed	13.75	27.07	25.47	29.21	18.88
	Adj. GP to Capital Employed	13.16	12.81	10.87	19.97	13.09
	d) Sales to Capital Employed	65.88	455.29	157.79	164.78	208.90
	e) GP to Sales	20.87	5.95	16.14	17.73	9.04
	Adj. GP to Sales	19.98	2.81	6.89	12.12	6.26
	f) Loans/Net Worth Ratio	0.61	0.69	0.18	0.21	0.63

4. CONSOLIDATED FINANCIAL STRUCTURE 1994-95
ALL CATEGORIES

(Rs. Lakhs)

ITEM	Exploration and Production	Refining and Marketing	Petro-chemi-Cals.	Engineering & other Serv. Units	Total
1. Authorised Capital	1630000	326960	20000	13000	1989960
2. i) Paid-up Capital	129124	95806	19982	7629	252541
ii) Preference Capital	0	0	0	0	0
iii) Reserves & Surpluses	1868679	1027484	24647	34142	2954952
3. i) Total loans	1409055	779936	8341	14283	2211615
ii) of which foreign	1230962	431013	0	0	1661975
4. Cash credits/advances from banks/others	18176	104071	3053	7432	132732
5. Net worth	1881310	1097463	44629	38636	3062038
6. i) Gross Block	2736032	1346971	47989	16961	4147953
ii) Less Depreciation	2243564	630736	28475	5986	2908761
iii) Net fixed assets	1936631	716235	19514	10975	2683355
iv) Working Capital	497565	405068	12759	28500	943892
v) Capital Employed (iii + iv)	2434196	1126692	32273	39475	3632636
7. i) Sales	1611807	5300948	73021	63831	7049607
ii) Other income	48633	80024	1137	4434	134228
TOTAL	1660440	5380972	74158	68265	7183835
8. i) Sales	84723	76904	2918	12454	176999
ii) of which bonus	3435	868.04	0	123	4426.04
iii) Average Emol. per person	1.46	1.21	1.51	1.54	
9. Inventories	180304	721171	12422	6574	920444
10. Gross profit					
a) Gross Profit before Intt. & Tax	333996	289430	9224	13956	646606
b) Adjusted gross profit	287064	236023	8301	9884	541272
11. Net Profit					
a) Net Profit after Intt. & Taxes	255800	194430	6106	7649	463985
b) Adjusted net profit	210694	142772	5183	3587	362236
12. Dividents declared	13626	25392	1998	821	41837
13. Corporate Tax	10193.43	71558	2580	4818	89149.43
% age of					
a) NP to paid-up capital	198.10	202.94	30.56	100.26	183.73
Adj. NP to paid-up capital	163.17	149.02	25.94	47.02	143.44
b) NP to Net Worth	13.60	17.72	13.68	19.80	15.15
Adj. NP to Net Worth	11.20	13.01	11.61	9.28	11.83
c) GP to Capital Employed	13.72	25.69	28.58	35.35	17.80
Adj. GP to Capital Employed	11.79	20.95	25.72	25.04	14.90
d) Sales to Capital Employed	66.22	470.49	226.26	161.70	194.06
e) GP to Sales	20.72	5.46	12.63	21.86	9.17
Adj. GP to Sales	17.81	4.45	11.37	15.48	7.68
f) Loans/Net Worth Ratio	0.75	0.71	0.19	0.37	0.72

SOURCE: 1. Annual Reports of the Companies and data supplied by them.
2. Adjusted/Gross Profits. Net Profits, and other terms are as defined in the glossary of terms.

5. CONSOLIDATED FINANCIAL STRUCTURE EXPLORATION AND PRODUCTION

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	1630000	1630000	1630000
2. i) Paid-up Capital	129124	237257	244424
ii) Preference Capital	Nil	0	0
iii) Reserves & Surpluses	1868679	2007035	2236734
3. i) Total Loans	1409055	1312672	1177980
ii) of which foreign	1230962	1178042	996788
4. Cash credits/advances from banks/others	18176	6251	21374
5. Net worth	1881310	2152626	2469016
6. i) Gross Block	2736032	5019791	5543236
ii) Less Depreciation	2243564	2705739	3094482
iii) Net fixed assets	1936631	2314052	2448754
iv) Working Capital	497565	459405	563898
v) Capital Employed (iii + iv)	2434564	2773457	2891745
7. i) Sales	1611807	1827261	1859964
ii) Other income	48633	54113	116757
TOTAL	1660440	1881374	1976721
8. i) Total emoluments (incl. perks)	84723	141136	109487
ii) of which bonus	2760	4045	3378
iii) Average Emol. per person	1.46	290	7.15
9. Inventories	180304	201102	224832
10. Gross profit			
a) Gross Profit before Intt. & Tax	333996	381375	402984
b) Adjusted gross profit	287064	365044	401789
11. Net Profit			
a) Net Profit after intt. & taxes	255800	266641	280163
b) Adjusted net profit	210694	302919	278161
12. Dividends declared	13626	30719	44940.54
13. Corporate Tax	10193	55286	82933
% age of			
a) NP to paid-up capital	198.1	433	114.62
Adj. NP to paid-up capital	163.17	322	113.8
b) NP to Net worth	13.6	-102	11.35
Adj. NP to Net Worth	11.2	55	11.27
c) GP to Capital Employed	13.72	99	13.94
Adj. GP to Capital Employed	11.79	89	13.89
d) Sales to Capital Employed	66.22	633	64.32
c) GP to Sales	20.72		21.67
Adj. GP to Sales	17.81		21.6
f) Loans/Net Worth Ratio	0.75	4	0.48

6. FINANCIAL STRUCTURE
OIL & NATURAL GAS CORPORATION LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	1500000	1500000	1500000
2. i) Paid-up Capital	34592	142592	142592
ii) Preference Capital	Nil	NII	Nil
iii) Reserves & Surpluses	1617303	1693289	1865318
3. i) Total Loans	1281166	1207034	1067018
ii) of which foreign	1180767	1128559	932370
4. Cash credits/advances from banks/others	8171	0	17250
5. Net worth	1544800	1760095	2003486
6. i) Gross Block	2360574	4516880	4905762
ii) Less Depreciation	2051726	2446936	2801036
iii) Net fixed assets	1753012	2069944	2104726
iv) Working Capital	407869	452800	515588
v) Capital Employed (iii + iv)	2160881	2522744	2620314
7. i) Sales	1176229	1311051	1323549
ii) Other income	15951	12683	61071
TOTAL	1192180	1323734	1384620
8. i) Total emoluments (incl. perks)	73861	125347	86309
ii) of which bonus	2759	2693	2765
iii) Average Emol. per person	1.61	285	199
9. Inventories	152322	173239	194751
10. Gross profit			
a) Gross Profit before Intt. & Tax	249484	283416	287330
b) Adjusted gross profit	233533	316308	325609
11. Net Profit			
a) Net Profit after intt. & taxes	193107	194543	203365
b) Adjusted net profit	177156	273174	241644
12. Dividends declared	6874	20166	28519
13. Corporate Tax	1346	40888	49916
% age of			
a) NP to paid-up capital	558.24	136.43	142.62
Adj. NP to paid-up capital	512.13	191.58	169.47
b) NP to Net worth	12.5	11.05	9.71
Adj. NP to Net Worth	11.47	15.52	12.06
c) GP to Capital Employed	11.55	11.23	10.97
Adj. GP to Capital Employed		12.54	12.43
d) Sales to Capital Employed	54.43	51.97	50.51
e) GP to Sales	21.21	21.62	21.71
Adj. GP to Sales	19.85	24.13	24.6
f) Loans/Net Worth Ratio	0.83	0.69	0.53

7. FINANCIAL STRUCTURE
ONGC VIDESH LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	3000	3000	3000
ii) Preference Capital	Nil	Nil	Nil
iii) Reserves & Surpluses	11695	11018	8823
3. i) Total Loans	10500	2770	7670
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	0	0	0
5. Net worth	5667	1118	5127
6. i) Gross Block	21	22	32
ii) Less Depreciation	10	11	12
iii) Net fixed assets	11	11	20
iv) Working Capital	7187	3877	2523
v) Capital Employed (iii + iv)	7198	3888	2543
7. i) Sales	0	0	0
ii) Other income	2054	1339	597
TOTAL	2054	1339	597
8. i) Total emoluments (incl. perks)	44	71	120
ii) of which bonus	1	4	5
iii) Average Emol. per person	1	1.98	3.5
9. Inventories	0	0	0
10. Gross profit			
a) Gross Profit before Intt. & Tax	1935	-477	-7978
b) Adjusted gross profit		1093	0
11. Net Profit			
a) Net Profit after intt. & taxes	110	-1676	-7170
b) Adjusted net profit		283	0
12. Dividends declared	0	0	0
13. Corporate Tax	0	0	0
% age of			
a) NP to paid-up capital	3.67	-55.87	0.06
Adj. NP to paid-up capital	0	9.43	0
b) NP to Net worth	1.94	-149.91	-139.85
Adj. NP to Net Worth	0	25.31	0
c) GP to Capital Employed	26.88	-12.27	-313.72
Adj. GP to Capital Employed		28.11	0
d) Sales to Capital Employed	N.A.	0	0
e) GP to Sales	N.A.		
Adj. GP to Sales			
f) Loans/Net Worth Ratio	1.85	2.48	1.5

8. FINANCIALL STRUCTURE
OIL INDIA LIMITED

(Rs. Lakhs)

	Particulars	1994-95	1995-96	1996-97
1.	Authorised Capital	25000	25000	25000
2.	i) Paid-up Capital	7000	7133	14267
	ii) Preference Capital	0	0	0
	iii) Reserves & Surpluses	158354	178221	189236
3.	i) Total Loans	36800	22662	19838
	ii) of which foreign	16764	5297	5848
4.	Cash credits/advances from bank/others	10005	6251	4124
5.	Net worth	165354	182621	203503
6.	i) Gross Block	103710	215757	244714
	ii) Less Depreciation	51441	97564	1090040
	iii) Net fixed assets	52268	118193	135674
	iv) Working Capital	46314	48501	47034
	v) Capital Employed (iii + iv)	98582	166694	182708
7.	i) Sales	99302	97126	104129
	ii) Other income	15474	20524	11955
	TOTAL	114776	117650	116084
8.	i) Total emoluments (incl. perks)	9042	12830	18932
	ii) of which bonus	675	1348	608
	iii) Average Emol. per person	0.9	1.28	1.5
9.	Inventories	18307	16704	17590
10.	Gross profit			
	a) Gross Profit before Intt. & Tax	37963	35956	34626
	b) Adjusted gross profit	23880	16504	30729
11.	Net Profit			
	a) Net Profit after intt. & taxes	25821	20646	22014
	b) Adjusted net profit	11738	6693	18117
12.	Dividends declared	1680	2100	3741
13.	Corporate Tax	8841	11953	10825
	% age of			
	a) NP to paid-up capital	368.87	289.44	154.3
	Adj. NP to paid-up capital	137.69	93.83	126.99
	b) NP to Net worth	15.62	11.31	10.82
	Adj. NP to Net Worth	7.1	3.66	8.9
	c) GP to Capital Employed	38.51	21.57	18.95
	Adj. GP to Capital Employed	24.22	9.9	16.82
	d) Sales to Capital Employed	100.73	58.27	56.99
	e) GP to Sales	38.23	37.02	33.25
	Adj. GP to Sales	24.05	16.99	29.51
	f) Loans/Net Worth Ratio	0.22	0.12	0.1

9. FINANCIAL STRUCTURE
GAS AUTHORITY OF INDIA LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	100000	100000	100000
2. i) Paid-up Capital	84532	84532	84565
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	81327	124507	173357
3. i) Total loans	80589	80206	83454
ii) of which foreign	33431	44186	58570
4. Cash credits/advances from banks/others	0	0	0
5. Net worth	165489	208792	256901
6. i) Gross Block	271727	287132	392729
ii) Less Depreciation	140387	161228	184395
iii) Net fixed assets	131340	125904	208334
iv) Working Capital	36195	-45773	-1246
v) Capital Employed (iii + iv)	167535	80131	86181
7. i) Sales	336276	419084	432286
ii) Other income	15154	19567	43134
TOTAL	351430	438651	475420
8. i) Total emoluments (incl. perks)	1776	3068	4126
ii) of which bonus	0	0	0
iii) Average Emol. per person	0.9	1.71	1.85
9. Inventories	9675	11159	12491
10. Gross profit			
a) Gross Profit before Intt. & Tax	44614	62480	89006
b) Adjusted gross profit	29651	31139	45452
11. Net Profit			
a) Net Profit after intt. & taxes	36762	53128	61955
b) Adjusted net profit	21800	22769	184000
12. Dividends declared	5072	8453	12681
13. Corporate Tax	6	2445	22192
% age of			
a) NP to paid-up capital	43.49	62.85	73.26
Adj. NP to paid-up capital	25.79	26.94	21.76
b) NP to Net Worth	22.21	25.45	24.12
Adj. NP to Net Worth	13.17	10.91	7.16
c) GP to Capital Employed	26.63	77.97	103.28
Adj. GP to Capital Employed	17.70	38.86	52.74
d) Sales to Capital Employed	200.72	523	501.60
e) GP to Sales	13.27	14.91	20.59
Adj. GP to Sales	8.82	7.43	10.51
f) Loans/Net Worth Ratio	0.49	0.38	0.32

10. CONSOLIDATED FINANCIAL STRUCTURE
REFINING & MARKETING

(Rs. Lakhs)

	Particulars	1994-95	1995-96	1996-97
1.	Authorised Capital	326960	326960	329460
2.	i) Paid-up Capital	95806	99311	100211
	ii) Preference Capital	0	0	0
	iii) Reserves & Surpluses	1027484	1303409	1539952
3.	i) Total loans	779936	919848	1761791
	ii) of which foreign	431013	596721	903665
4.	Cash credits/advances from banks/others	104071	183981	644953
5.	Net worth	1097463	1339387	1634062
6.	i) Gross Block	1346971	1674352	2049718
	ii) Less Depreciation	630736	737986	883352
	iii) Net fixed assets	716235	939366	1168869
	iv) Working Capital	405068	693449	1330785
	v) Capital Employed (iii + iv)	1126692	1629815	2514087
7.	i) Sales	5300948	7420378	9553227
	ii) Other income	80024	349233	129281
	TOTAL	5380972	7769611	9682508
8.	i) Total emoluments (incl. perks)	76904	120800	117017
	ii) of which bonus	868.04	1993	3742
	iii) Average Emol. per person	1.21	16	1.74
9.	Inventories	721171	719443	857715
10.	Gross profit			
	a) Gross Profit before Intt. & Tax	289430	441251	439237
	b) Adjusted gross profit	236023	208718	267145
11.	Net Profit			
	a) Net Profit after intt. & taxes	194430	240782	268924
	b) Adjusted net profit	142772	130987	168903
12.	Dividends declared	25392	34221	36393
13.	Corporate Tax	71558	117026	103286
	% age of			
	a) NP to paid-up capital	202.94	242.45	268.36
	Adj. NP to paid-up capital	149.02	131.90	168.55
	b) NP to Net Worth	17.72	17.98	16.46
	Adj. NP to Net Worth	13.01	9.78	10.34
	c) GP to Capital Employed	25.69	27.07	17.47
	Adj. GP to Capital Employed	20.95	12.81	10.63
	d) Sales to Capital Employed	470.49	455.29	379.99
	e) GP to Sales	5.46	5.95	4.60
	Adj. GP to Sales	4.45	2.81	2.8
	f) Loans/Net Worth Ratio	0.71	0.69	1.08

11. FINANCIAL STRUCTURE
INDIAN OIL CORPORATION LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	250000	250000	250000
2. i) Paid-up Capital	36980	38925	38927
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	621753	748568	873181
3. i) Total loans	536671	687036	1315629
ii) of which foreign	428807	596077	903398
4. Cash credits/advances from banks/others	49650	134774	412231
5. Net worth	658733	787492	912108
6. i) Gross Block	593798	798499	1039666
ii) Less Depreciation	305833	358973	437498
iii) Net fixed assets	287965	439526	602168
iv) Working Capital	260845	458059	906516
v) Capital Employed (iii + iv)	548810	897585	1508684
7. i) Sales	2845790	4386185	6207357
ii) Other income	52198	311082	89390
TOTAL	2897988	4697267	6296747
8. i) Total emoluments (incl. perks)	42484	56309	60731
ii) of which bonus	19	62	1919
iii) Average Emol. per person	1.26	1.69	1.83
9. Inventories	418494	445825	490132
10. Gross profit			
a) Gross Profit before Intt. & Tax	138327	232548	207608
b) Adjusted gross profit	103267	93342	95764
11. Net Profit			
a) Net Profit after intt. & taxes	101886	124871	140823
b) Adjusted net profit	66827	70724	52387
12. Dividends declared	10469	15569	15574
13. Corporate Tax	35098	51662	37357
% age of			
a) NP to paid-up capital	275.52	320.80	361.76
Adj. NP to paid-up capital	180.71	181.69	134.58
b) NP to Net Worth	15.47	15.86	15.44
Adj. NP to Net Worth	10.14	8.98	5.74
c) GP to Capital Employed	25.20	25.91	13.76
Adj. GP to Capital Employed	18.82	10.40	6.35
d) Sales to Capital Employed	518.54	488.67	411.40
e) GP to Sales	4.86	5.30	3.34
Adj. GP to Sales	3.63	2.13	1.51
f) Loans/Net Worth Ratio	0.81	0.87	1.44

12. FINANCIAL STRUCTURE
BHARAT PETROLEUM CORPORATION LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	20000	20000	20000
2. i) Paid-up Capital	15000	15000	15000
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	124553	158180	193495
3. i) Total loans	40780	52410	136081
ii) of which foreign	701	507	267
4. Cash credits/advances from banks/others	12130	28731	53884
5. Net worth	139553	173180	208495
6. i) Gross Block	207763	297486	346645
ii) Less Depreciation	124525	145621	167286
iii) Net fixed assets	124914	151865	179359
iv) Working Capital	1564	44404	97713
v) Capital Employed (iii + iv)	126478	196269	277072
7. i) Sales	759043	925379	1055355
ii) Other income	12923	20063	15594
TOTAL	7719668	945442	1070949
8. i) Total emoluments (incl. perks)	13738	28715	21138
ii) of which bonus	495	1401	1383
iii) Average Emol. per person	1.2	2.5	1.81
9. Inventories	108791	62898	78356
10. Gross profit			
a) Gross Profit before Intt. & Tax	49824	69216	75166
b) Adjusted gross profit	39022	33906	61887
11. Net Profit			
a) Net Profit after intt. & taxes	29218	38578	40760
b) Adjusted net profit	20135	15655	53682
12. Dividends declared	4950	4950	4950
13. Corporate Tax	14913	26700	26200
% age of			
a) NP to paid-up capital	194.79	257.19	271.73
Adj. NP to paid-up capital	134.23	104.37	357.88
b) NP to Net Worth	20.94	22.28	19.55
Adj. NP to Net Worth	14.43	9.04	25.75
c) GP to Capital Employed	39.39	35.27	27.13
Adj. GP to Capital Employed	30.85	17.28	22.34
d) Sales to Capital Employed	600.14	471.49	380.90
e) GP to Sales	6.19	7.48	7.12
Adj. GP to Sales	5.14	3.66	5.86
f) Loans/Net Worth Ratio	0.29	0.30	0.65

13. FINANCIAL STRUCTURE

HINDUSTAN PETROLEUM CORPORATIO LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	25000	25000	25000
2. i) Paid-up Capital	19152	20695	20855
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	153949	251099	308412
3. i) Total loans	60207	44573	141121
ii) of which foreign	254	137	0
4. Cash credits/advances from banks/others	24776	16863	87140
5. Net worth	158745	209046	327748
6. i) Gross Block	276084	315976	377632
ii) Less Depreciation	128914	148337	177269
iii) Net fixed assets	147170	167639	200363
iv) Working Capital	56524	94917	196239
v) Capital Employed (iii + iv)	203694	262556	410750
7. i) Sales	1041726	1186627	1394144
ii) Other income	6904	10274	17015
TOTAL	1048630	1196901	1411159
8. i) Total emoluments (incl. perks)	12226	21286	22854
ii) of which bonus	0	5	1
iii) Average Emol. per person	1.1	1.9	1.63
9. Inventories	90783	114337	154023
10. Gross profit			
a) Gross Profit before Intt. & Tax	61549	89216	103921
b) Adjusted gross profit	58293	48913	86905
11. Net Profit			
a) Net Profit after intt. & taxes	39129	51424	61222
b) Adjusted net profit	35873	28035	44205
12. Dividends declared	3830	7079	9190
13. Corporate Tax	18388	33171	32946
% age of			
a) NP to paid-up capital	204.31	248.49	293.57
Adj. NP to paid-up capital	187.31	135.47	211.97
b) NP to Net Worth	24.65	24.60	23.46
Adj. NP to Net Worth	22.60	13.41	13.49
c) GP to Capital Employed	30.22	33.98	25.41
Adj. GP to Capital Employed	28.62	18.63	21.16
d) Sales to Capital Employed	511.42	451.95	339.41
e) GP to Sales	5.91	7.52	7.45
Adj. GP to Sales	5.60	4.12	6.23
f) Loans/Net Worth Ratio	0.38	0.21	0.43

14. FINANCIAL STRUCTURE
COCHIN REFINERIES LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	7500	7500	7500
2. i) Paid-up Capital	6893	6894	6894
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	43219	52397	59760
3. i) Total loans	30978	28265	30783
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	41	56	3975
5. Net worth	50113	59291	66654
6. i) Gross Block	83259	85999	97714
ii) Less Depreciation	24151	29131	33528
iii) Net fixed assets	59108	56868	64188
iv) Working Capital	19026	23568	22827
v) Capital Employed (iii+iv)	78133	80436	87015
7. i) Sales	217318	338356	391775
ii) Other income	798	1624	1585
Total	218116	339980	393360
8. i) Total emoluments (incl.perks)	1272	2217	2242
ii) of which bonus	1	0	0
iii) Average Emol. per person	1	1.61	1.09
9. Inventories	28147	34810	41207
10. Gross profit			
a) Gross profit before Intt. & Tax	13454	18351	14154
b) Adjusted gross profit	12513	13701	12528
11. Net Profit			
a) Net Profit after intt. & taxes	10477	11108	9293
b) Adjusted net profit	9535	6763	7667
12. Dividends declared	1792	1930	1930
13. Corporate Tax	702	3000	1600
% age of			
a) NP to paid-up capital	151.99	161.13	134.8
Adj. NP to paid-up capital	138.33	98.1	111.21
b) NP to Net Worth	20.91	18.73	13.94
Adj NP to Net Worth	19.03	11.41	11.5
c) GP to Capital Employed	17.22	22.81	16.27
Adj. GP to Capital Employed	16.02	17.03	14.4
d) Sales to Capital Employed	278.14	420.65	450.24
e) GP to Sales	6.19	5.42	3.61
Adj. GP to Sales	5.76	4.05	3.2
f) Loans/Net Worth Ratio	0.62	0.48	0.46

15. FINANCIAL STRUCTURE
MADRAS REFINERIES LIMITED

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	20000	20000	20000
2. i) Paid-up Capital	14345	14361	14361
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	53537	58400	65745
3. i) Total loans	82839	73911	937025
ii) of which foreign	1251	0	0
4. Cash credits/advances from banks/others	9648	313	12980
5. Net worth	66539	72761	79373
6. i) Gross Block	110416	136769	141410
ii) Less Depreciation	39284	46243	54147
iii) Net fixed assets	71132	90526	87263
iv) Working Capital	49001	49020	76206
v) Capital Employed (iii+iv)	120456	139546	163469
7. i) Sales	244034	219795	249319
ii) Other income	3666	2793	1909
Total	247700	222588	251228
8. i) Total emoluments (incl.perks)	2734	5383	2885
ii) of which bonus	91	124	83
iii) Average Emol. per person	1.53	2.92	1.59
9. Inventories	60170	44869	76410
10. Gross profit			
a) Gross profit before Intt. & Tax	16424	19490	24904.4
b) Adjusted gross profit	16214	11997	23038
11. Net Profit			
a) Net Profit after intt. & taxes	9219	9411	10218
b) Adjusted net profit	9010	7570	8351
12. Dividends declared	3427	3590	3587
13. Corporate Tax	935	0	1876
% age of			
a) NP to paid-up capital	64.27	65.53	81.71
Adj. NP to paid-up capital	62.81	52.71	58.15
b) NP to Net Worth	13.86	12.93	14.78
Adj NP to Net Worth	13.54	10.4	10.52
c) GP to Capital Employed	13.63	13.97	15.21
Adj. GP to Capital Employed	13.46	8.6	14.09
d) Sales to Capital Employed	202.59	157.51	152.52
e) GP to Sales	6.93	8.87	9.99
Adj. GP to Sales	6.64	5.46	9.24
f) Loans/Net Worth Ratio	1.24	1.02	1.18

16. FINANCIAL STRUCTURE
IBP CO. LIMITED

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	2500	2500	5000
2. i) Paid-up Capital	1476	1476	2215
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	20541	22472	23761
3. i) Total loans	25359	31472	44476
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	7221	2217	5805
5. Net worth	11888	23364	25975
6. i) Gross Block	20038	24765	31110
ii) Less Depreciation	3392	4291	5358
iii) Net fixed assets	16646	20474	25752
iv) Working Capital	13058	15957	21413
v) Capital Employed (iii+iv)	34290	36431	47165
7. i) Sales	159912	325977	215475
ii) Other income	3300	3012	3470
Total	163212	328989	218945
8. i) Total emoluments (incl.perks)	2877	4541	4532
ii) of which bonus	199	265	283
iii) Average Emol. per person	1.05	1.71	1.69
9. Inventories	7881	8657	9575
10. Gross profit			
a) Gross profit before Intt. & Tax	5866	7049	8162
b) Adjusted gross profit	2941	3037	5103
11. Net Profit			
a) Net Profit after intt. & taxes	2352	2442	2554
b) Adjusted net profit	572	-174	-506
12. Dividends declared	436	517	481
13. Corporate Tax	177	729	572
% age of			
a) NP to paid-up capital	159.35	165.45	115.3
Adj. NP to paid-up capital	-38.75	-11.79	-22.84
b) NP to Net Worth	19.78	10.45	9.83
Adj NP to Net Worth	-4.81	-0.74	-1.95
c) GP to Capital Employed	17.11	19.35	17.31
Adj. GP to Capital Employed	8.58	8.34	10.82
d) Sales to Capital Employed	466.35	894.78	456.85
e) GP to Sales	3.67	2.16	3.79
Adj. GP to Sales	1.84	0.93	2.37
f) Loans/Net Worth Ratio	2.13	1.35	1.71

17. FINANCIAL STRUCTURE
LUBRIZOL INDIA LIMITED

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	1920	1920	1920
2. i) Paid-up Capital	1920	1920	1920
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	7423	9144	11789
3. i) Total loans	3102	2181	NIL
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	605	1027	2546
5. Net worth	9343	11064	13709
6. i) Gross Block	10691	11391	11691
ii) Less Depreciation	2992	3485	4010
iii) Net fixed assets	7699	7906	7682
iv) Working Capital	4231	6168	8402
v) Capital Employed (iii+iv)	12411	14074	16084
7. i) Sales	30222	34814	36536
ii) Other income	203	201	238
Total	30425	35015	36774
8. i) Total emoluments (incl.perks)	914	1296	1496
ii) of which bonus	10	17	3
iii) Average Emol. per person	1.32	1.85	1.57
9. Inventories	6826	8018	7991
10. Gross profit			
a) Gross profit before Intt. & Tax	2760	4129	6046
b) Adjusted gross profit	2556	3794	3887
11. Net Profit			
a) Net Profit after intt. & taxes	1484	2297	3384
b) Adjusted net profit	1308	1763	3117
12. Dividends declared	480	576	672
13. Corporate Tax	676	1160	2262
% age of			
a) NP to paid-up capital	77.29	119.64	176.26
Adj. NP to paid-up capital	68.13	91.82	162.34
b) NP to Net Worth	15.88	20.76	24.69
Adj NP to Net Worth	14	15.93	22.74
c) GP to Capital Employed	22.24	29.34	37.59
Adj. GP to Capital Employed	20.59	26.96	24.17
d) Sales to Capital Employed	243.51	247.36	227.16
e) GP to Sales	9.13	11.86	15.18
Adj. GP to Sales	8.46	10.9	10.64
f) Loans/Net Worth Ratio	0.33	0.2	0

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18. FINANCIAL STRUCTURE
INDIAN OIL BLENDING LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	40	40	40
2. i) Paid-up Capital	40	40	40
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	2509	3149	3809
3. i) Total loans	0	0	0
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	0	0	0
5. Net worth	2549	3189	3849
6. i) Gross Block	3246	3467	4256
ii) Less Depreciation	1645	1905	2161
iii) Net fixed assets	1601	1562	2095
iv) Working Capital	819	1356	1470
v) Capital Employed (iii+iv)	2420	2918	3849
7. i) Sales	2903	3245	3265
ii) Other income	32	184	81
Total	2935	3429	3346
8. i) Total emoluments (incl.perks)	659	1053	1139
ii) of which bonus	53	119	71
iii) Average Emol. per person	1.02	1.68	1.45
9. Inventories	79	29	22
10. Gross profit			
a) Gross profit before Intt. & Tax	1226	1252	1144
b) Adjusted gross profit	1217	28	1071
11. Net Profit			
a) Net Profit after intt. & taxes	665	651	671
b) Adjusted net profit	656	651	598
12. Dividends declared	8	10	10
13. Corporate Tax	552	604	471
% age of			
a) NP to paid-up capital	1662.5	1627.5	1677.73
Adj. NP to paid-up capital	1640	1627.5	1495
b) NP to Net Worth	26.09	20.41	17.43
Adj NP to Net Worth	25.74	20.41	15.53
c) GP to Capital Employed	50.66	42.91	29.72
Adj. GP to Capital Employed	50.29	0.96	27.83
d) Sales to Capital Employed	119.96	111.21	84.83
e) GP to Sales	42.23	38.58	35.04
Adj. GP to Sales	41.92	0.86	32.8
f) Loans/Net Worth Ratio	0	0	0

19. FINANCIAL STRUCTURE

BONGAIGAON REFINERY & PETROCHEMICALS LTD

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	20000	20000	20000
2. i) Paid-up Capital	19982	19982	19982
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	24647	30957	32904
3. i) Total loans	8341	8082	7363
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	3053	1674	1143
5. Net worth	44629	45584	52848
6. i) Gross Block	47989	65850	68479
ii) Less Depreciation	28475	30864	32599
iii) Net fixed assets	19514	34986	35880
iv) Working Capital	12759	16447	15622
v) Capital Employed (iii + iv)	32273	51433	51502
7. i) Sales	73021	81158	83857
ii) Other income	1137	992	906
TOTAL	74158	82150	84763
8. i) Total emoluments (incl. perks)	2918	3960	3565
ii) of which bonus	0	192	89
iii) Average Emol. per person	1.51	2.07	1.88
9. Inventories	12422	14538	14907
10. Gross profit			
a) Gross Profit before Intt. & Tax	9224	13098	4163
b) Adjusted gross profit	8301	5593	2785
11. Net Profit			
a) Net Profit after intt. & taxes	6106	9015	2907
b) Adjusted net profit	5183	2706	1530
12. Dividends declared	1998	2705	872
13. Corporate Tax	2580	2496	235
% age of			
a) NP to paid-up capital	30.56	45.12	14.55
Adj. NP to paid-up capital	25.94	13.54	7.66
b) NP to Net Worth	13.68	19.78	5.5
Adj. NP to Net Worth	11.61	5.94	2.9
c) GP to Capital Employed	28.58	25.47	8.08
Adj. GP to Capital Employed	25.72	10.87	5.41
d) Sales to Capital Employed	226.26	157.79	162.82
e) GP to Sales	12.63	16.14	4.96
Adj. GP to Sales	11.37	6.89	3.32
f) Loans/Net Worth Ratio	0.19	0.18	0.14

20. CONSOLIDATED FINANCIAL STRUCTURE
ENGINEERING SERVICES AND OTHER UNITS

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	13000	13000	13000
2. i) Paid-up Capital	7629	7629	7629
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	34142	41778	49145.8
3. i) Total loans	14283	9824	17020
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	7432	8091	4675
5. Net worth	38636	46734	53530
6. i) Gross Block	16961	19876	22263
ii) Less Depreciation	5986	6971	8113
iii) Net fixed assets	10975	12905	14150
iv) Working Capital	28500	38659	41929
v) Capital Employed (iii + iv)	39475	51564	60333
7. i) Sales	63831	84969	93571
ii) Other income	4434	5615	6127
TOTAL	68265	90584	99698
8. i) Total emoluments (incl. perks)	12454	16222	18051
ii) of which bonus	123	96	65.43
iii) Average Emol. per person	1.51	5	2.26
9. Inventories	6547	8808	7378
10. Gross profit			
a) Gross Profit before Intt. & Tax	13956	15062	15517
b) Adjusted gross profit	9884	10299	9090
11. Net Profit			
a) Net Profit after intt. & taxes	7649	8571	8356
b) Adjusted net profit	3587	4279	2234
12. Dividends declared	821	971	1061
13. Corporate Tax	4818	4142	4492
% age of			
a) NP to paid-up capital	100.26	484	109.54
Adj. NP to paid-up capital	47.02	239	29.28
b) NP to Net Worth	19.8	38	15.61
Adj. NP to Net Worth	9.28	14	4.17
c) GP to Capital Employed	35.35	63	25.72
Adj. GP to Capital Employed	25.04	45	15.07
d) Sales to Capital Employed	161.7	936	155.09
e) GP to Sales	21.86	51	16.58
Adj. GP to Sales	15.48	37	9.71
f) Loans/Net Worth Ratio	0.37	1	0.32

21. FINANCIAL STRUCTURE
ENGINEERS INDIA LIMITED

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	1800	1800	1800
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	23819	30289	36809
3. i) Total loans	50	0	0
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	0	0	0
5. Net worth	25619	32089	38609
6. i) Gross Block	6769	8321	9028
ii) Less Depreciation	3070	3628	4203
iii) Net fixed assets	4828	4693	4825
iv) Working Capital	14255	23394	29530
v) Capital Employed (iii + iv)	19083	28087	38609
7. i) Sales	22401	25998	27452
ii) Other income	2377	3148	3375
TOTAL	24778	29146	30827
8. i) Total emoluments (incl. perks)	8502	11287	13014
ii) of which bonus	5	20	7
iii) Average Emol. per person	2.25	3.01	3.09
9. Inventories	174	167	148
10. Gross profit			
a) Gross Profit before Intt. & Tax	10415	10784	11401
b) Adjusted gross profit	8037	8047	7633
11. Net Profit			
a) Net Profit after intt. & taxes	5988	6830	7204
b) Adjusted net profit	3620	4066	3437
12. Dividends declared	360	450	540
13. Corporate Tax	4418	3952	4250
% age of			
a) NP to paid-up capital	332.67	379.44	400.22
Adj. NP to paid-up capital	201.11	225.89	190.94
b) NP to Net Worth	23.37	21.28	18.66
Adj. NP to Net Worth	14.13	12.67	8.9
c) GP to Capital Employed	54.58	38.39	29.53
Adj. GP to Capital Employed	42.12	28.65	19.77
d) Sales to Capital Employed	117.39	92.56	71.1
e) GP to Sales	46.49	41.48	41.53
Adj. GP to Sales	35.88	30.95	27.8
f) Loans/Net Worth Ratio	0	0	0

22. FINANCIAL STRUCTURE
BALMER LAWRIE & COMPANY LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	3000	3000	3000
2. i) Paid-up Capital	1629	1629	1629
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	10298	11458	12306
3. i) Total loans	13422	8662	16069
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	7432	8091	4675
5. Net worth	11927	13086	13934
6. i) Gross Block	8688	11027	12134
ii) Less Depreciation	2639	3048	3554
iii) Net fixed assets	6049	7979	8579
iv) Working Capital	12595	13597	11290
v) Capital Employed (iii + iv)	18644	21576	19869
7. i) Sales	37244	47089	54620
ii) Other income	1969	2387	2691
TOTAL	39213	49476	57311
8. i) Total emoluments (incl. perks)	3336	4203	4248
ii) of which bonus	99	52	41
iii) Average Emol. per person	1	1.51	1.5
9. Inventories	5840	7900	6571
10. Gross profit			
a) Gross Profit before Intt. & Tax	3419	4182	4059
b) Adjusted gross profit	1796	2128	1435
11. Net Profit			
a) Net Profit after intt. & taxes	1616	1681	1421
b) Adjusted net profit	-7	213	-1203
12. Dividends declared	461	521	521
13. Corporate Tax	400	190	242
% age of			
a) NP to paid-up capital	99.2	103.19	87.26
Adj. NP to paid-up capital	-0.43	13.08	-73.85
b) NP to Net Worth	13.55	12.85	10.2
Adj. NP to Net Worth	-0.06	1.63	-8.63
c) GP to Capital Employed	18.34	19.38	20.43
Adj. GP to Capital Employed	9.63	9.86	7.22
d) Sales to Capital Employed	199.76	218.25	288
e) GP to Sales	9.18	8.88	7.43
Adj. GP to Sales	4.82	4.52	2.63
f) Loans/Net Worth Ratio	1.13	0.66	1.15

23. FINANCIAL STRUCTURE
BIECCO LAWRIE LTD.

(Rs. Lakhs)

Particulars	1994-95	1995-96	1996-97
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	4200	4200	4200
ii) Preference Capital	0	0	0
iii) Reserves & Surpluses	25	31	31
3. i) Total loans	811	1162	951
ii) of which foreign	0	0	0
4. Cash credits/advances from banks/others	0	0	0
5. Net worth	1090	1559	987
6. i) Gross Block	375	528	1102
ii) Less Depreciation	277	295	356
iii) Net fixed assets	98	233	746
iv) Working Capital	1650	1668	1109
v) Capital Employed (iii + iv)	1748	1901	1855
7. i) Sales	4186	11882	11499
ii) Other income	88	80	61
TOTAL	4274	11962	11560
8. i) Total emoluments (incl. perks)	616	732	789
ii) of which bonus	19	24	17
iii) Average Emol. per person	0.64	0.79	0.84
9. Inventories	533	741	659
10. Gross profit			
a) Gross Profit before Intt. & Tax	122	96	57
b) Adjusted gross profit	51	124	22
11. Net Profit			
a) Net Profit after intt. & taxes	45	60	-269
b) Adjusted net profit	-26	0	0
12. Dividends declared	0	0	0
13. Corporate Tax	0	0	0
% age of			
a) NP to paid-up capital	1.07	1.43	-6.4
Adj. NP to paid-up capital	-0.62	0	0
b) NP to Net Worth	4.13	3.85	-27.25
Adj. NP to Net Worth	-2.39	0	0
c) GP to Capital Employed	6.98	5.05	3.09
Adj. GP to Capital Employed	2.92	6.52	1.19
d) Sales to Capital Employed	239.47	625.04	619.8
e) GP to Sales	2.91	0.81	0.5
Adj. GP to Sales	1.22	1.04	0.19
f) Loans/Net Worth Ratio	0.74	0.75	0.96

24. CAPITAL INVESTMENT OF THE PUBLIC JOINT SECTOR UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS AS ON 1.4.96 AND 1.4.97

(Rs. crores)

	Name of the Undertaking	1.4.96				1.4.97			
		Paid up Capital	Loans	Total	Govt Share	Paid up Capital	Loans	Total	Govt. Share
A.	**Expolration & Prooduction**	**2372.57**	**13126.72**	**15499.29**	**2257.67**	**2444.24**	**11779.79**	**14224.03**	**2415.62**
1.	ONGC	1425.92	12070.34	13496.26	1370.84	1425.92	10670.18	12096.1	1370.67
2.	ONGC-Videsh Ltd	30.00	27.70	57.70	0.00	30.00	76.70	106.70	88.22
3.	OIL	71.33	226.62	297.95	70.00	142.67	198.38	341.05	140
4.	GAIL	845.32	802.06	1647.38	816.83	845.65	834.54	1680.19	816.73
B.	**Marketing**	**993.11**	**9198.48**	**10191.59**	**705.08**	**1002.11**	**17643.37**	**18645.48**	**709.50**
5.	IOC	389.25	6870.36	7259.61	354.76	389.27	13156.29	13545.56	354.78
6.	BPCL	150.00	524.10	674.10	99.3	150.00	1360.81	1510.81	99.3
7.	HPCL	206.95	445.73	652.68	115.5	208.55	1411.21	1619.76	115.5
8.	CRL	68.94	282.65	351.59	37.94	68.94	307.83	376.77	37.94
9.	MRL	143.61	739.11	882.72	77.26	143.61	937.02	1080.63	77.26
10.	IBP Co. Ltd	14.76	314.72	329.48	8.8	22.15	444.76	466.91	13.2
11.	Lubrizol	19.20	21.81	41.01	11.52	19.20	25.46	44.66	11.52
12.	IOBL	0.40	0.00	0.40	0.00	0.40	0.00	0.40	0.00
C.	**Petrochemical**	**199.82**	**80.82**	**280.64**	**148.79**	**199.82**	**73.63**	**273.45**	**148.79**
13.	BRPL	199.82	80.82	280.64	148.79	199.82	73.63	273.45	148.79
D.	**Engineering Units**	**76.29**	**98.24**	**174.53**	**155.58**	**76.29**	**170.2**	**246.49**	**164.06**
15.	EIL	18.00	0.00	18.00	16.92	18.00	0.00	18.00	16.92
16.	Balmer Lawrie	16.29	86.62	102.91	114.57	16.29	160.69	176.98	123.05
17.	Biecco Lawrie	42.00	11.62	53.62	24.09	42.00	9.51	51.51	24.09
	GrandTotal (A+B+C+D)	**3641.79**	**22504.26**	**26146.05**	**3267.12**	**3722.46**	**29666.99**	**33389.45**	**3437.97**

25. GLOSSARY OF TERMS USED FOR TABLES ON FINANCIAL STATISTICS

1.	Loans	These include both secured and unsecured loans but exclude Interest accrued, if any, Included in the loans.
2.	Net Worth	This represents paid-up capital plus free reserves less accumulated losses (deficit) and defened revenue expenditure remaining unarnortised.
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 non 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 discount and products used for intermal consumption.
6.	Adjusted Gross Profit	Represents excess of income over expenditure before providing for interest on loans, taxes, appropriation to reserves, charges pertaining to previous years, donation, exchange fluctuation, loss on disposal of Assets, Dividends etc.
7.	Adjusted Net Profit	Represents the figure arrived at after dedcuting from the adjusted gross profit interest on loans bad debts and taxes but before appropriation to reserves.
8.	Dividend Declared	Includes also Dreference dividend. If any.
9.	Gross Profits & Net Profit	They are as given in the Annual Accounts of the Companies.

APPENDIX

APPENDIX

(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).
LV	:	Low Viscosity.
HV	:	High Viscosity.
HVI	:	High Viscosity Index
KL	:	Kilolitre
L:R I	:	Large Range I (45,000-79, 999 dwt).
LR II	:	Large Range II (80,000-159,999 dwt).
LVI	:	Medium Range (25,000-49,999 dwt).
MT	:	Metric Ton.
MTPA	:	Million Tonnes Per Annum.
MV	:	Medium Viscosity.
MVI	:	Medium Viscosity Index.
R&D	:	Research & Development.
ULCC	:	Ultra Large Crude Carrier (320,000-549,999 dwt).
VLCC	:	Very Large Crude Carrier (160,000 dwt and more).
NA	:	Not available.
-	:	Nil
Neg	:	Negligible.
Billion	:	10^9 or one thousand Million.
Trillion	:	10^{12} or one million million.
P	:	Provisional.
LOI	:	Letter of Intent
MMSCMD	:	Million Standard Cubic Metres Per Day
CNG	:	Compressed Natural Gas
MOU	:	Memorandum of Understanding

METRIC UNITS

LINEAR

10 Milimetres	=	1 Centimetre.
10 Centimetres	=	1 Decimetre
10 Decimetres	=	1 Metre.
10 Metres	=	1 Decametre
10 Decametres	=	1 Hectometre.
10 Hectometres	=	1 Kilometre
100 Sq. Milimetres	=	1 Sq. Centimetre.
100 Sq. Centimetres	=	1 Sq. Decimetre.
100 Sq. Decimetres	=	1 Sq. Metre
100 Sq. Metres	=	1 Sq. Decametre-1 Acre.
100 Sq. Acres	=	1 Sq. Hectometre-Hectare.
100 Hectares	=	1 Sq. Kilometre.

WEIGHT

10 Miligrams	=	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 Metric Tonne.

CAPACITY

10 Milimetres	=	1 Centilitre.
10 Centilitrees	=	1 Decilitre.
10 Decilitres	=	1 Litre.
10 Litres	=	1 Decalitre.
10 Decalitre	=	1 Hectolitre
10 Hectorlitres	=	1 Kilolitre.

VOLUME

1000 Cubic Milimetres	=	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 Milimetres (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 Inaternational Nautical Mile	=	6076.12 Feet
	=	1.852 Kilometres (km)
	=	1.5152 Statute mile

AREA

1 Square Inch	=	645.16 Square Milimetres (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.
91 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.
	=	0.892857 Long Ton
	=	0.97185 Tonnes
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) Calorie	=	4. 1868 Joules (J).
115 C calorie	=	4.1855 Joules (J).
1 Thermochemical Calorie	=	4.184 Joules (J).
1 Kilo Calorie (IT)	=	1000 Calories.
	=	3.96832 British Thermal Units.
	=	1.163 Watt Hours.
	=	1 Thermie.
1 Kilowat 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	=	735.499 watts (W).
(Pferdestaerke or Cheval Vapeur)	=	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 Imperia 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 (dm 3) or Litres.
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 Gubic Foot.
	=	0.02894 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 Americal 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 American 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.
1Gross Ton (Shipping)	=	2.83168 Cubic Metres or 100 cubic. Feet or Permanently Enclosed Space.
1 Ton of Liquified Methane Upon	=	aprox. 16 Barrels.
	=	Approx. 1400 cubic Metres of Natural Gas Depending Methane Content

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

PRODUCT	Litres to Metric Tonnes	Tonnes per K.L.	American Barrels to Metric Tonnes
1	2	3	4
Aviation Spirit 100/130	1421	0.7034	8.94
Aviation Spirit 144/145	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/87 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. Coke/Chemicals	1114	0.8977	7.01
Aromex	1221	0.8190	7.68
Linear Alkyl Benzen Feed Stock	1205	0.8239	7.88

VOLUME PER METRIC TON OF PETROLEUM PRODUCTS

PRODUCTS	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.	Furnace 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 figure at 15.6 degree C or 60 degree F.

PRODUCT SPECIFIC GRAVITY RANGES

PRODUCTS	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
Kerosene	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 convert 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	3.252	3.8	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 EQUIVALENT MUTIPLY BY

PRODUCT	MULTIPLIER
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

		K Cals/Kg. M cals/Tonne	BTUS/Kg.
	1	2	3
A.	**Oil Equivalence:**		
	Average Crude Oil/NGLS (a)	10,300	40,870
	United Nations	10,175	40,375
B.	**Oils 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.	**INDIA:**		
	Hard Coal	5,000	19,840
	Lignite-Brown Coal	2,310	9,16
	Firewood@	4,750	18,848
	Charcoal@	6,900	27,379
			K cals/Cu. Metre
E.	**Natural Gas-Production: (Average) India**		**8,000-9480**
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 curde oil relevant conversion 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 productin to hard coal equivalent base.
(c) Calorific value of 1 kwh of electricity.
(d) Represents K cals of hydro-carbon energies required to produce 1 kwh 01 electricity.
@ = as per Report ot Fuel Policy Committee 1974
Conversion Factor : 1K cal = 4.19 K Joules.

COEFFICIENTS USED TO CONVERT FROM ORIGINAL UNITS INTO STANDARAD COAL EQUIVALENTS

Products	Hard Coal	Lignite Brown Coal	Fuel wood
1	2	3	4
A. PRIMARY SOLIDS			
1. Standard Factor	1.000	0.385	0.333
2. India	0.714	0.330	
B. OTHER 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. Residuel Fuel Oil		1.416	
7. Liquified 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 percubic metre of gas understandard conditions of 15°C, 013.25 mbar, dry:

COAL REPLACEMENT AND EQUIVALENTS OF DIFFERENT FUELS

Fuels	Original Unit	Unit of coal equivalent (mtce)	Unit of coal replacement (mtcr)
1	2	3	4
Coal (coking			
6640 K cal/kg.,			
Non-coking coal			
Used in steam			
generation (5000			
Kcal/Kg.)	1 mt	1.0	1.0
Hard Coke	1 mt	1.3	1.3
Soft Coke	1 mt	1.5	1.3
Firewood (4750 Kcal/Kg.)	1 mt	0.95	0.95
Char Coal (6900 Kca/Kg.	1 mt	1.0	1.0
2. Oil Products: 10,000 K cal/Kg.			
Black Products (i.e			
Fuel Oil; F.O.;			
Refinery Fuel,			
LSHS, HHS).	1 mt	2.0	2.0
Kerosene & LPG	1 mt	2.0	8.0
HSDO & LDO	1 mt	2.0	9.0
Motor Spirit &			
Jet Fuel	1 mt	2.0	7.5
Natural Gas			
(9000K cal/Kg.)	109xm3	1.8	3.6
Electricity	109 kwh	1.0	1.0

m = Million
mt = Million Tonnes
Source = Fuel Policy Committee 1974
mtce = Million Tonnes of Coal Equivalent
mtcr = Million Tonnes of Coal Replacement

APPROXIMATE CALORIFIC EQUIVALENTS
(Oil=10,000 K Cal/Kg.)

Items		Million Tonnes of Oil equals
1. Heat Units	=	40 million BTU
	=	397 million 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).
	=	1.1 11 thousand million cub metres
	=	39.2 thousand million cub. feet
	=	107 million cubic feet per day of a year
4. Electricity (1 Kwh=3412 BTU) (1 Kwh-86 Kcal)	=	12 thousnad million KWH

Heat Units and others Expressed in Terms of million Tonnes of Oil

Items	Millions Tonnes of Oil equals
1. Heat Units	
10 million million BTU	0.25
100 million therms	0.25
10.000 teracalories	1.00
2. Solid Fuels	
1 million tonnes of coal	0.67
1 million tonnes of lignite approximates 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 thousend 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 Rate
1946-1970 and 1946-47-1970-71

(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	3.30852	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	4.76190	3.71792	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	1959-60	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 Rate
1971-1996 and 1971-72 to 1996-97

(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
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	9.579	9.702	9.455	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	11.363	1984-85	11.88675
1985	12.838	12.498	12.048	12.091	12.369	1985-86	12.23725
1986	12.312	12.500	12.592	13.039	12.611	1986-87	12.78650
1987	13.015	12.781	13.049	13.000	12.962	1987-88	12.96825
1988	13.043	13.429	14.276	14.920	13.917	1988-89	14.47650
1989	15.281	16.105	16.605	16.911	16.226	1989-90	16.66250
1990	17.029	17.344	17.554	18.087	17.504	1990-91	17.94850
1991	18.809	20.526	25.757	25.878	22.742	1991-92	24.51125
1992	25.914	25.890	25.890	25.979	25.918	1992-93	27.55250
1993	27.887	31.345	31.371	31.370	30.493	1993-94	31.36425
1994	31.371	31.310	31.371	31.388	31.375	1994-95	31.14132
1995	31.401	31.411	32.045	34.745	32.401	1995-96	33.450
1996	34.649	34.743	35.643	35.740	35.193	1996-97	35.500

Notes: (1) A new value of the Indian Re. of 7.50 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 September 22, 1949 to June 5, 1966 and 3,30852 rupees per U.S. Dollar from December 18,1946 to September 21, 1949.
(2) Exchange rate for the years 1970 and 1971 are based on Trade conversion Factors.
(3) Exchange rate for the year 1972 onwards are based on Par rates/market rates.
e=estimated
Source: International Financial Statistics.