

INDIAN PETROLEUM & NATURAL GAS STATISTICS

2001-02

MINISTRY OF PETROLEUM & NATURAL GAS
ECONOMICS AND STATISTICS DIVISION
GOVERNMENT OF INDIA
NEW DELHI

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM & NATURAL GAS

FOREWORD

The Ministry of Petroleum & Natural Gas has been publishing its annual bulletin "***Indian Petroleum & Natural Gas Statistics***" containing comprehensive information on the Oil & Gas Sector, beginning from 1967 upto 2000-01. The bulletin provides information both in terms of calendar year and the financial year, to cater to the requirements of the different users. It also includes in brief the chronology of important events of the Indian Oil Sector and the control orders issued during the year. We have also introduced a section on time series data this year.

The present compilation providing data for the year 2001-02, represents the sustained efforts of the Economics & Statistics Division of the Ministry.

We would welcome suggestions to restructure the bulletin or improve it any other manner.

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June 2003

MINISTRY OF PETROLEUM & NATURAL GAS
ECONOMICS & STATISTICS DIVISION

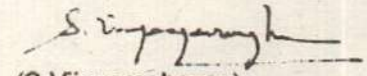
PREFACE

The Economics & Statistics Division of the Ministry of Petroleum & Natural Gas has conscientiously endeavoured to bring out its annual bulletin "***Indian Petroleum & Natural Gas Statistics***" from 1967. This has been made possible with inputs furnished by various Ministries and Departments of the Government of India, Petroleum Planning & Analysis Cell as well as the oil companies.

Part-I of the compilation deals with the Indian Petroleum Statistics, Part-II with International Petroleum Statistics, Part-III with Plan Statistics (including the draft X Plan figures) and Part-IV focusses on financial performance of the oil companies. Part-V pertaining to time series data on Petroleum & Gas Statistics is a fresh addition to the bulletin.

We express our deep sense of gratitude to all the data providers to the Ministry and record our appreciation for the efforts put in by the officials of the Economics & Statistics Division viz., Ms. Pushpa Thottan, Joint Advisor, Shri Khursheed Alam, Research Officer, Sr. Investigators Shri D.C.Garg and Dr.P.G.S.Rao, Ms. Kanwaljit Kaur, Jr. Investigator and Mrs. Parvesh Goswami, UDC.

Suggestions for its improvement would be duly appreciated.



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June 2003

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SCOPE AND COVERAGE OF DATA PUBLISHED

1. **Scope:** The Indian Petroleum & Natural Gas Statistics presents comprehensive statistics on various aspects of Indian Petroleum and Natural Gas Industries. The data on international developments in respect of the important segment of Petroleum and Natural Gas Industries have also been presented in the publication.

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

3. **Source:** The primary statistics in respect of petroleum and natural gas industries included in the publication are based on various returns submitted by the Indian Oil companies to the Ministry of Petroleum & Natural Gas.

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

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

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

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

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

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

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

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

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

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

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

INDIAN ECONOMY-SELECTED INDICATORS

	Indicator	Unit/base	1990-91	1995-96	1998-99	1999-00	2000-01	2001-02*
1.	Geographical Area	M.Sq.Km.	3.29	3.29	3.29	3.29	3.29	3.29
2.	Population	Million	839	927	975	1001	1019	1037
3.	Gross National Product at factor cost:							
	(i) At current prices	Rs.Crores	503409	1059787	1583110	1740207	1878429	2055107
	(ii) At constant prices+	Rs. Crores	683670	886961	1070498	1136898	1181483	1249095
4.	Net National Product at factor cost:							
	(i) At current prices	Rs. Crores	450145	941861	1415044	1557781	1679982	1839232
	(ii) At constant prices+	Rs. Crores	614206	787809	948305	1007743	1044915	1104689
5.	Per Capita Net National Product:							
	(i) At current prices	Rupees	5365	10149	14395	15562	16487	17736
	(ii) At constant prices+	Rupees	7321	8489	9647	10067	10254	10653
6.	Foreign Exchange Reserves							
	(i) Gold++	Rs. Crores	6828	15659	12559	12973	12711	14868
	(ii) SDR	Mn. of SDRs	75.9	55.9	8.0	4.0	2.0	-5.0
	(iii) Foreign Exchange	Rs.Crores	4388	58446	125412	152924	184482	249118
	Foreign Exchange Rate	Rs./US$	17.943	33.450	42.071	43.333	46.684	48.74
7.	Foreign Trade:							
	(i) Import	Rs.Crores	43193	122678	178332	215236	230873	243645
	(ii) Export	Rs. Crores	32558	106353	139753	159561	203571	207746
	(iii) Balance of Trade	Rs.Crores	-10635	-16325	-38579	-55675	-27302	-35899
8.	Index of Production:							
	(i) Agricultural	@	148.4	160.7	177.9	176.8	167.3	177.1
	(ii) Industrial	1993-94=100		123.3	145.2	154.9	162.6	166.2
9.	Wholesale Price Index:	1993-94=100		121.6	140.7	145.3	155.7	161.3
10.	Consumer Price Index:							
	(i) Industrial Workers	1982=100	193	313	414	428	444	463
	(ii) Agricultural Labourers	1986-87=100		237#	293	306	305	309
	(iii) Urban non-manual worker:	1984-85=100	161	259	337	352	371	390
11.	Employment:!							
	(i) Public Sector	Million	19.06	19.43	19.42	19.31	19.14	na
	(ii) Private Sector	Million	7.68	8.51	8.70	8.65	8.65	na
	Total	Million	26.74	27.94	28.12	27.96	27.79	na
	No. of persons on live register of employment exchange	Million	34.89	36.90	40.21	40.31	41.23	42.07@@
12.	Energy Generation (Gross):							
	Coal	Mn. Tonnes	211.73	270.13	292.27	299.97	309.63	322.63
	Lignite	Mn. Tonnes	13.77	22.14	23.42	22.12	22.95	20.05
	Natural Gas	Mn.Cub.Mtr.	17998	22639	27428	28446	29477	29714
	Crude Oil	Mn.Tonnes	33.02	35.17	32.72	31.95	32.43	32.03
	Petroleum Products	Mn.Tonnes	51.27	58.32	68.24	84.96	102.51	107.28
13.	Electricity:							
	(i) Utilities							
	Hydel	B.KWH	71.7	72.6	82.9	80.6	74.5	74.0
	Thermal	B.KWH	186.5	299.3	353.7	386.8	408.1	423.6
	Nuclear	B.KWH	6.1	8.0	11.9	13.3	16.9	17.7
	Total	B.KWH	264.3	379.9	448.5	480.7	499.5	515.3
	(ii) Non-utilities	B.KWH	25.1	38.2	48.4	51.5	55.0	61.9
	GRAND TOTAL	**B.KWH**	**289.4**	**418.1**	**496.9**	**532.2**	**554.5**	**577.2**

*: *Provisional.*
@ : Triennium ending 1981-82
@@ : January 2002.
!: As on 31 March
: November-March
na= not available.
+ : figures upto 1992-93 are based on old series at 1980-81 prices and from 1993-94 onwards are based on 1993-94 prices.
++: 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. 17, 1990.

Source : Economic Survey

TRENDS IN INDIAN PETROLEUM INDUSTRY AT A GLANCE

Item	Unit	1997-98	1998-99	1999-00	2000-01	2001-02*
1. Reserves ! (Balance Recoverable)						
(i) Crude Oil	Mn. Tonnes	747	716	660	703	732
(ii) Natural Gas	Bn. Cub. Mt.	692	675	648	760	763
2. Consumption						
(i) Crude Oil (in terms of refinery crude throughput)	Mn. Tonnes	65.17	68.54	85.96	103.44	107.27
(ii) Petroleum Products (excl. RBF)	Mn. Tonnes	84.29	90.56	97.09	100.07	100.43
3. Production:						
(i) Crude Oil	Mn. Tonnes	33.86	32.72	31.95	32.43	32.03
(ii) Petroleum Products	Mn. Tonnes	61.31	64.54	79.41	95.61	100.00
4. Imports & Exports						
(i) Gross Imports:						
(a) Qty: Crude Oil	Mn. Tonnes	34.49	39.81	57.80	74.10	78.71
Pol. Products	Mn. Tonnes	22.97	23.77	16.61	9.27	7.01
Total (a)	Mn. Tonnes	57.46	63.58	74.41	83.37	85.72
(b) Value: Crude Oil	Rs. Crores	15872	14917	40028	65932	60397
Pol. Products	Rs. Crores	14309	12276	14186	12093	7249
Total (b)	Rs. Crores	30181	27193	54214	78025	67646
Pol. Imports as per DGCI&S		30341	26919	45421	71497	66770
(ii) Exports:						
(a)Qty: Crude Oil	Mn. Tonnes	0.00	0.00	0.00	0.00	0.00
Pol. Products	Mn. Tonnes	2.38	0.72	0.75	8.37	10.07
Total (a)	Mn. Tonnes	2.38	0.72	0.75	8.37	10.07
(b)Value: Crude Oil	Rs. Crores	0	0	0	0	0
Pol. Products	Rs. Crores	1266	306	698	7672	8219
Total (b)	Rs. Crores	1266	306	698	7672	8219
(iii) Net Imports:						
(a) Qty: Crude Oil	Mn. Tonnes	34.49	39.81	57.80	74.10	78.71
Pol. Products	Mn. Tonnes	20.59	23.05	15.86	0.90	-3.06
Total (a)	Mn. Tonnes	55.08	62.86	73.66	75.00	75.65
(b) Value: Crude Oil	Rs. Crores	15872	14917	40028	65932	60397
Pol. Products	Rs. Crores	13043	11970	13488	4421	-970
Total (b)	Rs. Crores	28915	26887	53516	70353	59427
(iv) Unit Value of Crude oil Imports (gross)	Rs./MT	4602	3747	6925	8898	7673
5. India's Total Exports	Rs. Crores	130101	139753	159561	203571	207746
6. Pol. Imports as percentage of India's total exports						
(i) Gross Imports	%	23.2	19.5	34.0	38.3	32.6
(ii) Net Imports	%	22.2	19.2	33.5	34.6	28.6
7. Contribution of oil sector to Centre/State Resources						
(i) Royalty from crude oil	Rs. Crores	1800	1708	2049	2272	2486
(ii) Royalty from gas	Rs. Crores	415	437	547	608	659
(iii) Oil Development Cess	Rs. Crores	2838	2751	2716	2728	2878
(iv) Excise & Custom duties	Rs. Crores	20973	21513	32662	35912	36377RE
(v) Sales Tax	Rs. Crores	12758	13490	18106	23375	N.A.
(vi) Dividend	Rs. Crores	1055	2243	2587	3482	N.A.
(vii) Corporate Tax/Others	Rs. Crores	1925	2621	3863	5345	N.A.
8. Natural Gas:						
(i) Gross Production	Mn. Cu. Mtr	26401	27428	28446	29477	29714
(ii) Utilisation	Mn. Cu. Mtr	24522	25716	26885	27860	28037

*: Provisional. RE: Revised Estimates. !: As on 1st April of initial year.

PART-I

PETROLEUM STATISTICS

PART-I

PETROLEUM STATISTICS

1.2 (a) CHRONOLOGY OF IMPORTANT EVENTS OF INDIAN PETROLEUM INDUSTRY DURING 2001-2002

(A) EXPLORATION & PRODUCTION

1. OIL INDIA LIMITED (OIL)

- Discovered five new hydrocarbons structures namely Uriamguri, Haldibari, South Chandmari, North Makum and Lohali in Assam.
- Completed gravity survey in the logistically difficult area in Sadiya PEL in Arunachal Pradesh. OIL stated seismic survey in the logistically difficult Namsai/Namchik areas in Arunachal Pradesh and foot hills of Himalaya in Ganga Valley, U.P./Uttaranchal using portable shothole drilling rig.
- Completed Second phase of 3D seismic survey in Saurashtra offshore.
- Flaring of gas in OIL's field in Assam & Arunachal Pradesh was brought down to level of 0.33 MMSCMD (7-8% of produdction) which is the lowest ever flare level achieved by OIL since inception of the company.
- Acquired four blocks under second round of NELP — one block in Rajasthan independently and three blocks namely, Mumbai offshore (MB-DWN-2000/2), Mahanadi onshore (MN-ONN-2000/1) and Mahanadi offshore (MN-OSN-2000/2) in consortium.

2. OIL & NATURAL GAS CORPORATION LTD. (ONGCL)

- Exploratory efforts have resulted in seven new hydrocarbon finds - Katpur & Chaklasi in Cambay Basin, Pendurru & Sanarudravaram in KG Basin, GD in KG offshore deepwater, PBS-1 in Palk Bay shallow offshore in Ramnad area of Cauvery Basin and Nazira in Upper Assam.
- Registered a net profit Rs. 6198 crore during 2001-02 with an increase of 969 crore over year 2000-01.
- Sagar Samrat, India's first offshore rig completed its 125th well in August 2001. The rig has performed consistently for 27 years, a rare feat.
- Mini refinery at Tatipaka (A.P.) in southern region commissioned in Sept. 2001.
- Completed two projects viz. Balol Insitu Combustion and ZA Platform. Presently, 9 major projects are under various stage of implementation.
- ISO-14001 certification for environment management awareded to ICP platform in Mumbai High, CPF-Gandhar, GGS-Narimanam and GCS-Tatipaka.
- ISO-9001-2000 Certification awarded to Indigenous Development Group (INDEG) Dehradun alongwith Regional INDEG Units at Mumbai, Chennai, Baroda, Kolkata and Sibsagar.
- Achieved 98% of the crude oil production target and 100.2% of gas production target.
- Gas sales was 101.3% of the target fixed for the year.
- Seismic survey done during the year was - onland 2D (Ground Line Kilometre) achieved 65% of the target, whereas 3D (Sq.Km) achieved 110% of the target.
- Offshore 2D (Line Kilometre) achieved 94% of the target fixed and in case of 3D (LK) - 258% of the target was achieved.
- 148 exploratory wells and 156 development wells were drilled as against the target of 194 and 143 wells respectively.

3. ONGC VIDESH LIMITED (ONGCVL)

- Declared commerciality of Sakhalin-Project, Russia in Oct. 2001.
- Commenced drilling operations in Vietnam project in Dec. 2001, and offshore Pipe Laying in March, 2002.
- Govt. of Iraq ratified the block — 8 project Iraq contract in May 2001.
- Exploration block-A1, Myanmar — agreement signed in Feb. 2002.
- GNOP Project, Sudan — confidentiality agreement signed in Nov. 2001.

4. GAS AUTHORITY INDIA LIMITED (GAIL)

GAIL to proceed on "Geo-Scientific investigation in offshore Goa for gas hydrate exploration", approved in April 2001.

Signed production sharing contract for six blocks under NELP-II with the Government of India.

Signed with Daewoo International, Korea for GAIL's 10% participating interest in the exploration block A-1 (Myanmar Offshore).

Signed deed of assignment and assumption with Hardy Exploration & Production (India) Inc. (HEPI), Chennai for GAIL's 25% participating interest in the exploration block CY-OS/2, Cauvery offshore basin.

Signed agreement with Geological Survey of Canada to join consortium of "Mallik Gas Hydrate Research Project" for Gas Hydrate.

Signed Research Project" for Gas Hydrate drilling/production testing in Mackenzie Delta, Canada.

Signed share holders' agreement with Gujarat State Petroleum Corporation for GAIL's 12% equity participation in the gas based 156 MW power project of Gujarat State Energy Generation Limited, Hazira.

Signed gas co-operation agreement with West Bengal Industrial Development Corporation, Kolkata.

Signed Heads of Agreement with M/s Mosbacher India Ltd. and Hindustan Oil Exploration Company for Sale/purchase of natural gas from PY-1 fields in Cauvery Basin.

Signed MOU with public sector oil companies for product and information sharing for sale of LPG for a period of 2 years.

Received "British Safety Council National Safety Award 2000" for LPG recovery plants at Usar (Near Mumbai) and Lakwa (Assam).

Commissioned 13 Km. long, 8" dia KSP - Bodaskuru pipeline and 9 Km long, 12" dia Mori-Dindi pipeline and associated terminal facilities.

Commissioned 1.3 Km. long, 4" dia pipeline and associated terminal facilities for gas supply to M/s Rolex Paper Mill.

Commissioned 204 Km long, 18" dia Tatipaka-Kondapali-Lanco pipeline for gas supply of natural gas to Lanco Power Plant, Andhra Pradesh.

Received ISO 14001 certification for Environment Management System for LPG plant at Usar and compressor station at Khera.

Commissioned 7.7 Km. long, 18" dia pipeline, 2.2 km long 4" dia pipeline and 3.8 Km long 4" dia pipeline with associated terminal facilities for supply of natural gas to M/s BSES Andhra Power Limited, M/s Vastsa Power Project and Regency Ceramics Limited (Mummidivaram) Andhra Pradesh respectively.

Commissioned 3.7 Km long, 15" dia Ponnamanda-Kadali pipeline and 9.8 Km long, 16" dia S. Yanam-Gudala pipeline with associated handling systems.

Commissioned Agartala city gas trunk pipeline despatch station and Pyrolysis pilot plant to reduce coke formation in cracker.

Signed internal 0.90 MMSMD gas supply contract with M/s Ravva, a joint venture company, from satellite fields.

Signed gas supply contract with M/s PPN Power Generating Company for supply of 0.75 MMSCMD of gas, M/s Delhi Vidyut Board for supply of 1.75 MMSCMD of gas for their Pragati Power Porject, M/s BSES Andhra M/s Vemagiri Power Generation Ltd., Vemagiri for supply of 1.64 MMSCMD of gas in K.G. Basin and Regency Ceramics Ltd. for supply of 0.275 MMSCMD from Kuttalam fields in Cauvery Basin.

(B) REFINING AND MARKETING

5. BHARAT PETROLEUM CORPORATION LTD. (BPCL)

Launched a computerised Intranet based Package titled 'Incident Reporting and Investigation Software' in the Refinery.

During the year, refinery processed 8.7 MMT of crude. Moreover, refinery processed 9 MMT of crude in the calendar year 2001, for the first time ever in a continuous stretch of twelve months.

Inaugurated state-of-the-art Bharatgas Bottling Plant at Butibori, Nagpur in April, 2001.

Signed an agreement with Shell Aviation, under which, with effect from 1.4.2001, BPCL is the exclusive authorised distributor for all grades of Aero Shell Lubricants in India.

Commissioned the third Ethanol-Gasoline Pilot project for doping of Petrol with Ethanol, at Panewadi (Manmad) Installation in June, 2001.

In November, 2001, Lubes Business Unit signed an MOU with M/s. Maruti Udyog Limited for sale of Automol SF/CC Lubricants as "Maruti Genuine Oil" through their extensive countrywide network of Maruti Authorised Service Stations and Dealer Workshops.

Lube Oil Blending Plant of BPC at Budge was awarded ISO-9002 certification by M/s. DNV, U.K.

In December, 2001, 44 TMTPA Sinnar LPG Plant at Nashik was commissioned filling 9600 cylinders per shift, the 22 TMTPA plant will supply Nashik, Deolali, Malegaon/Igatpuri and Pimpalgaon of Maharashtra.

Engineering & Projects Northern Region team have been awarded ISO 9001 Certification for Quality Management System by M/s. International Certifications Services.

Commissioned Goa LPG Bottling Plant (10 TMTPA capacity) in February, 2002. Now the total number of Bottling plants commissioned on date is 40.

Inaugurated Tanir Bavi Installation in February, 2002, with a tankage capacity of 12,650 Kls for Naphtha and 600 Kls for HSD.

In February, 2002, the joint BPC-IOC Liquid Cargo Jetty at JNPT was comissioned with unloading of Tanker, Jhulelal, carrying 4700 KL of HFLS/HDS and 14000 KL of HSD at an estimated cost of the JNPT was Rs. 198.02 crores.

Commissioned Irugur Tap off Point (TOP) installation and Karur Receiving Terminal in March, 2002 as part of the 292 km Cochin-Coimbatore-Karur Pipeline Project. Project being implemented by Petronet CCK Ltd.

Completed implementation of SAP R/3 solution in BPC, setting a benchmark in planning, execution and roll out of the system across the country.

Inaugurated Borkhedi Depot in March, 2002 consolidating BPC's infrastructure in Central India.

LPG SBU commissioned 313 LPG distributorship in 2001-02, the highest in the Industry.

Under customer loyalty programmes issued Petro Card to 7 lakh customers covering 28 cities across the country, with average value of transactions per day around Rs. 2.02 crore.

BPCL refinery has been awarded, Level-8 rating (highest in India so far) on International Safety Rating System by M/s DNV, U.K.

6. HINDUSTAN PETROLEUM CORPORATION LIMITED (HPCL)

Commissioned the pre-flash drum project in FRE Unit of Mumbai Refinery during September 2001.

The Refinery successfully carried out the Guarantee Test Run of Across the Blend Optimisation (ATBO) of OM&S Automation project, in turn becoming the first Indian Refinery to implement such online blend optimisation.

The Refinery received the prestigious CSIR (Council of Scientific & Industrial Research) Technology Award in the area of Chemical Technology for the year 2001, jointly with IIP Dehradun, for developing indigenous technology for the Hexane treatment plant using NMP as solvent.

The Refinery achieved LEVEL 6 of International Safety Rating System during March 2002.

The Refinery bagged the award the longest accident-free period for the year 2000 from the National Safety Council Maharashtra Chapter. The refinery had topped amongst all chemical & fertiliser factories in Maharashtra.

The 24" dia, 8 KM long tanker discharge pipeline between sunken ship jetty and ATP terminal at Visakh laid at an estimated cost of Rs. 14.7 crore, was commissioned in June, 2001 to receive tanker parcels upto 45000 MT.

Two new LPG bottling plants at Ajmer (Rajasthan) and Nashik (Maharashtra) with a total capacity of 88 TMTPA, capacity augmentation of three existing plants by 30 TMTPA and 2 nos. LPG TOPs were completed during the year, at a total cost of Rs. 97 crore.

Completed 4 new POL depots having a total tankage of 204,535 KL at Haldwani, Sangrur, Ghatkesar & Suryapet and additional tankage of 13,330 KL were completed at a cost of Rs. 320.60 million.

Visakh-Vijayawada Pipeline (VVPL) capacity expansion and extension from Vijayawada to Secunderabad to cater to the important consumption zones of Andhra Pradesh was completed and commissioned in March, 2002, at an estimated cost of Rs. 377.55 crore. The 16"/14" dia Pipeline has been designed for a thruput of 1.94 MMTPA (between Vijayawada and Secunderabad) and capacity of Visakh-Vijayawada Pipeline has been expanded 4.1 MMTPA to 5.38 MMTPA. The tap-off terminal cum-intermediate pumping station at Suriapet, receiving terminal at Ghatkesar (Secunderabad) with requisite tankages were also commssioned, along with the pipeline.

Spent an amount of Rs. 41.30 Lakh on Gujarat earthquake affected persons in the first phase of the relief operations.

100% dividend has been recommended for the year 2001-2002.

7. INDIAN OIL CORPORATION LIMITED (IOCL)

(a) Refineries

(i) Gujarat Refinery

With the completion of automation of Black Oil Tank Truck loading facility, automation of entire Tank Truck loading facilities completed.

LABFS supplies to M/s Nirma through Pipeline commenced in May, 2001. Return stream from M/s Nirma received through Pipeline in Refinery in December, 2001.

To improve crude throughput and LSHS customer base, despatch of low viscosity LSHS started to M/s. KEC, Yelahanka w.e.f. May, 2001.

First batch of Polymer Grade Hexane was successfully produced at Gujarat Refinery during Sep' 01 through innovative efforts by Gujarat Refinery and R&D Centre jointly and despatched on M/s IPCL in Jan' 02.

Completed/Commissioned FPU—II revamp jobs for increasing capacity from 2.5 to 3.0 MMPTA. New hydrogen unit revamped from 10 TMTPA to 15 TMTPA and commissioned.

HSD and MS pumping to Dumad was started in December, 2001. This enabled the commissioning of Dumad terminal in May, 2001 for despatch of the products. LPG pumping to Dumad terminal was also was also started in March, 2002.

Started despatch of "FO" having high viscosity (range 160-180 cst at 50 deg C) during winter season for M/s Indo-Rama in February, 2002.

(ii) Barauni Refinery

Bi-electric desalter in AVU-I and AVU-II commissioned.

For increasing profitability of the Refinery, High Sulphur imported crude processing started on 31st Aug. 2001 along with Low Sulphur imported crude.

AVU-III was restarted after completion of furnace restoration job.

(iii) **Mathura Refinery**

Commissioned Power Recovery Turbine in HCU on 28.04.01 with in-house modification in the control logic.

Inaugurated the automated system of wagon loading in February, 2001.

New Propylene Horton spheres (3 nos.) each of 900 M3 capacity were mechanically completed in Sept. '01 and safely commissioned in Dec. 2001.

Produced, for the first time 96 RON Gasoline, a specially formulated import substitute as a fuel for Unmanned Aerial Vehicles (UAVs).

Refinery went live on the SAP R/3 system in January, 2002.

Successfully conducted test run at 50% concentration of IOC-R&D developed FCC catalyst LOTUS-24. This would lead to economic benefits and mark IOC's entry into catalyst manufacturing.

(iv) **Haldia Refinery**

For the first time, export of packed bitumen (80/100 grade) to Bangladesh was started in June, 2001. A total of 2674 MT of bitumen was exported to Bangladesh during the year 2001-02.

For the first time, tank wagon despatch stared in July, 2001 based on PD meter reading and online Pass Out Voucher.

LGO coalescern CDU-II (Cataytic Dewaxing Unit) was commissioned to reduce hydrocarbon loss.

Depropaniser in CDU-II was successfully installed for production of propane.

Fort the first time, despatch of Micro-Crystalline Wax (MCW) ex-Haldia Refinery commissioned in Sep. 2001, after commissioning of MCW Pelletising Unit in August, 2001.

Commissioned in September, 2001, grass root Fluidised Catalytic Cracking Unit (FCCU) of 0.7 MMTPA capacity eight months ahead of schedule.

Commissioned in March, 2002 second Vacuum Distillation Unit (VDU-II) at Haldia Refinery to improve distillate quality for 20 BS production of International quality.

New Gas Turbine of 20 MW capacity was synchronised in March, 2002.

(v) **Assam Oil Division (AOD), Digboi.**

Commissioned Wax Hydro-Finishing Unit in June, 2001 in order to improve wax quality.

Mechanically completed Solvent De-waxing Unit was in December, 2001, eight months ahead of schedule.

Digboi Refinery commissioned in December, 1901 has achieved unique distinction of continuous operation for 100 years. Comemorative stamp released, centenary museum and ecological park inaugurated in Jan. 2002.

Commissioned AOD's first retail outlet under Operation Vijay Scheme at Gokulpura, Dist. Silkar (Rajasthan).

(vi) **Panipat Refinery**

Commissioned Standby Sulphur Recqvery Unit.

For the first time, produced DHPP(A), a defence product, as an alternate source of supply.

Produced 30-40 grade bitumen. Similarly first commercial batch of ATF produced from OHCU and despatched during March, 2002.

(vii) **Guwahati Refinery**

First batch of Calcined Needle Coke, a value added import substitute, produced in Aug. 2001 and despatched in Nov. 2001.

Mechanically completed Reformer and PSA system of Hydrogen Plant and SRU block.

Mechanically completed Hydrotreater Project on 28.12.2001 two months ahead of schedule.

To produce unleaded MS, ISOSIV UNIT a Guwahati Refinery was commissioned in January, 2002.

Regular Production of Green Needle Coke was started in Feb' 02 and despatch commenced in March, 2002.

(b) Marketing Division

Secured Business of United Airlines at Delhi and Malaysian Airlines at Mumbai, Bangalore and Hyderabad.

Implemented ATF de-regulation smoothly in toality w.e.f. 1.4.01.

Released first tank truck of 5% ethanol mixed petrol in the market in April, 2001 from Miraj Depot (Maharashtra).

Completed new depot at Passighat, Arunachal Pradesh having capacity of 1000 KL.

Commissioned Malda and Loni Bottling Plants having capacity of 22 TMPA and 88 TMTPA respectively.

New TOP (Tap off Point) at Madurai having capacity of 79,500 KL completed.

First time export of Bitumen approx, 1000 MTs to Bangaldesh executed during June'01.

Commissioned state of the art hydrant refueling system at Netaji Subhash Chandra Bose Airport, Kolkata.

Completed Resitement of Balasore Depot having capacity of 12,020 KL.

Completed new TOP on BO basis at Koyali having capacity of 70,000 KL.

Completed new depot with a capacity of 1000 KL at Along, Arunachal Pradesh.

Signed agreement for import of 120 TMT FO for 1 year to M/s. Tata Power Co.

Implemented new fertilizer pricing policy, effective 9th July'01.

Commissioned GAIL's TOP at Loni and direct pumping in Viramgam-Koyali-Kandla Bhatinda Pipleine (VK-KBPL).

First time import of LPG at Haldia import facilities.

Commissioned Erode Bottling Plant having capacity of 44 TMTPA.

New Automated Terminal at Tuticorin having capacity of 48,600 KL completed.

Completed New TOP on BO basis at Mathura (UP) having capacity of 53,046 KL.

Commissioned Shahjahanpur (UP) and Mannargudi Bottling Plant having capacity of 34 TMTPA and 6 TMTPA respectively.

Completed Jammu (J&K) and Ujjain (Bihar) bottling plants having capacity of 22 TMTPA and 44 TMTPA respectively.

Commissioned pipeline bunkering facility at JNPT and return stream of SKO by pipeline from Nirma to Dumad.

Commissioned Kashipur bottling plant having capacity of 34 TMTPA.

Reduced the deposit rate on 14.2 kg domestic cylinder from Rs. 900/- to Rs. 700/- in Feburary 2002.

Completed new TOP at Kondapalli, Vijaywada (AP) having capacity of 47565 KL.

Tied up 100% supplies of major petroleum products to Nepal for a period of 5 years through an agreement with M/s NOC.

Commissioned IOC's first auto LPG dispensing station for public distribution in Mumbai on 31.3.02.

Commissioned Lakhimpur, Jharsuguda and Guna bottling plants having capacity of 22 TMTPA each.

(c) **Pipelines**

Replacement & Commissioning of Bed Plate of MP2 at Vadinar and delivery at Mourigram of 10043 Kls achieved in April 2001 in HMRPL (Haldia-Mourigram-Rajbandh Pipeline).

First batch of 3414 Kls of Hsd-37UL EX-MR and PGMS delivered successfully at Meerut (UP) and Pratapura (UP) respectively.

Mainline pumping unit MP3 and MP4 commissioned at HBCPL Bolpur and Haldia respectively in June and July 2001 under HBCPL (Haldia-Barauni-Crude Pipeline) augmentation project.

Commissioned HBCPL Crude storage tanks HT-02 & HT-01 at Haldia.

Old Fiat Engines of HBPL have been replaced by Motor driven Pumps and commissioned. Direct pumping from VKPL (Viramgam-Koyali Pipeline) to KBPL (Kandla-Bhatinda Pipeline) commenced in Aug., 2001.

Got SMPL (Salaya-Mathura Pipeline) re-certified under ISO—14001 for 3 years from August 2001 to August 2004.

3rd booster and 4th Mainline engine commissioned at Kandla in 3rd & 12th August 2001 respectively under KBPL augmentation project.

KBPL achieved highest daily pumping of 27409 KL in August, 2001.

First High Sulphur crude tanker berthed at HOJ-III for BOR in August, 2001.

Commissioned automatic detection and phone flooding system at Gauridad, Vadinar, Sidhpur, Jamnagar, Viramgam Surendarnagar, Aburoap and Rewari.

SAP connectivity extended to Panipat Sector stations (Sanganer, Rewari, Sangrur and Bhatinda) through OFC communication system.

MOU (Memorandum of Understanding) on product pipelines of Eastern Region surpassed the overall yearly MOU target of 5.3 MMT by end of February 2002.

HMRPL (1.9 MMT) have achieved yearly MOU target in February, 2002.

Ever heights daily throughput 5009 Kls was achieved in February 2002 in HB (Haldia-Barauni).

KAPL (Kandla-Bhatinda Pipeline) was awarded Golden Peacock Environment Management Award 2001 and also received British Safety Council Award for the year 2002 and National Safety Award 1999 (Runner up) from Ministry of Labour.

Received Biritsh Safety Council Award 1999 by-KAPL, KBPL, SMPL.

Received USA National Safety Council 1999 by-KAPL.

Accredited MJPL, KBPL, GSPL & HBCPL with ISO-14001 certification.

(d) **R&D Centre—Faridabad**

Investment of Rs. 65.00 crore made on R&D.

10 patents were granted (10 Indian, 7 US, 1 Canadian and 1 European).

11 new patents filed (4 Indian, 5 US, 1 China and 1 Brazil).

Issued 78 internal projects reports.

Published/presented 96 technical papers in international/national journals, conferences/seminars.

Won five national awards for excellence in various scientific/technical areas.

Developed 42 new product formulations including 10 global formulations, 3 genuine oils and 7 cost-effective products.

62 products were commercialized.

Obtained 32 product approvals from national/international OEM's/users.

14 products certified by American Petroleum Institute.

Organized/conducted field trials on 12 new products.

Received 5364 technical service samples for testing.

Developed Corrosion inhibitor and tested in various lube formulations.

Oilivorous-S technology for safe disposal of oily sludge put on field trial.

Developed crumb rubber modified bitumen and multifunctional additive for gasoline.

Process for improving deodorization and dry point of Panipat MTO (Mineral Turpentine Oil) was developed.

Process for production of food/polymer grade hexane was commercialised at Gujarat Refinery.

Developed and installed novel continuous film contractor at Guwahati Refinery.

LPG-MAX was developed as a new process for maximization of LPG using novel catalyst system.

Produced 200 tons of LOTUS-24 and put on trial at Mathura Refinery.

Carried out Plant trials on IMAX additive at Gujarat Refinery.

Developed low pressure process for removal of Mercaptans from ATF.

Developed Visbreaker model and installed at Haldia Refinery.

Developed new FCC-MOD based on graphic user interface and installed at Mathura Refinery.

Completed Four crude assays.

Eight fresh catalysts were evaluated for non-Indian Oil refineries.

Evaluated six tender samples of FCC catalysts for non IOC refineries.

Instrumented pig technology completed field trails and is ready for commercialisation.

Signed seven Memorandums of Collaboration with various organizations for joint development/scale-up of new technologies.

Implemented SAP R/3 software under Manthan project.

Conducted 23 in-house training programmes covering 178 officers and 127 non-officers.

Organized nine programmes for officers of Marketing/Refineries/Pipeline.

14 Invited lectures were organized.

8. IBP Co. Limited (IBPCL)

Achieved debt-free status, the Company repaid all its loan liabilities during the year. Turnover aggregating Rs. 8,453 crore as against Rs. 8,393 crore in the previous year.

Profit After Tax (PAT) of Rs. 195.79 crore representating an increase of almost 261% over the PAT of Rs. 54.22 crore in the previous year. The Profit Before Tax was Rs. 289.95 crore as against Rs. 61.22 crore in the previous year.

Significant reduction in the interest cost from Rs. 82.56 crore in the previous year to Rs. 29.54 crore in 2001-02 due to repayment of borrowings.

"Excellent Performance" under the MOU System on the Government of India for the tenth consecutive year.

Commissioned 27 new retail outlets including 3 Jubilee Retail Outlets (JRO) and 6 company Owned Company Operated Outlets (COCO) increasing the Company's network to 1559 Retail Outlets as at the close of the financial year.

Commissioned 29 new LPG distributorship in the third year of operation resulting in enrolment of 40,139 new LPG customers. The Company currently has 54 LPG distributors catering to a customer base exceeding 1,50,000.

Commitment to Quality and Quantity (Q&Q) Assurance Scheme to cover 87 more Outlets; thereby extending the coverage of the Q&Q Assurance Scheme to 1534 Outlets representing 98% of the Company's Retail Outlet network.

Continuation of ISO 9002 Certification for the Lube Oil Blending Plant at Budge-Budge near Kolkata, Besides, seven of the JROs/COCOs have also been allotted ISO 9002 Certification.

Overall physical performance in sales during 2001-02 was lower as compared to the previous year. The sale of Petroluem Products aggregated 4.67 Million Kiolitres (excluding sale to Oil Marketing Companies) during the year as against 4.91 Million Kilolitres in the previous year.

The company's retail network during the end of the year stood at 1559 retail outlets and 375 Superior Kerosene Lil (SKO)/Light Diesel Oil (LDO) dealership.

9. Bongaigaon Refinery & Petrochemicals Ltd. (BRPL)

The cumulative crude throughput in the refinery was 1.475 million tonnes which included 0.34 million tonnes of low sulfur imported crude oil. The refinery was originally designed to process only Assam crude, which was revamped for processing low sulfur imported crude oil.

Fuel & loss in the refinery was 6.54% of crude throughput, which include 0.23% hydrocarbon loss. This was the lowest ever Fuel & Loss achieved so far.

Government of India has granted 50% Excise duty relief to BRPL on sale of POL products with effect from March 2002.

10. Chennai Petroleum Corporation Limited (CPCL)

Received the certification of prestigious ISO 14001 from M/s Bureau Veritas Quality International (BVQI) for Manali Refinery.

CPCL and Birla Institute of Technology (BITS), Pilani, Rajasthan have signed a MOU with objective to foster collaboration between the two institutions to promote educational and research activities pertaining to Process Engineering.

Declared a 25% dividend amounts to Rs. 19.32 crores for the year 2000-01.

CPCL and Indian Oil tanking Ltd. have signed an agreement to set up LPG storage and bulk loading facilities at Vaikadu village near Manali on Built, Own and Operate (BOO) basis.

CPCL has been awarded (International Organisation for Standardisation) ISO 9001:2000 and Occupational Health and Safety Assessment Series.

Received Occupational Health and Safety Assessment Series (OHSAS) 18001:99 for compliance of Quality Management System (QMS) and Occupational Health and Safety Management System (OH & SMS) for its Manali Refinery.

Atmospheric and Vaccums Distillation coloumns were erected at 3 MMTPA expansion site.

Inaugurated the Zero Discharge Plant at Manali Refinery Complex.

11. Kochi Refineries Limited (KRL)

LPG production of 36,323 tonnes for August, 2002 on account of the LPG recovery enhacement modifications done to CDU-I and FCCU during the current annual turn around.

KRL achieved a record in the production of LPG 361.41 TMT, ATF 86.7 TMT and MTO 16.2 MT during the year.

Consequent to the Bharat Petroleum Corporation Limited (BPCL) acquiring the shares of Govenment of India in KRL, the marketing rights of KRL's products were transferred to BPCL with effect from 1st April, 2001.

High Court of Kerala approved the scheme of amalgamation of Cochin Refineries, Balmer Lawrie Limited with Kochi Refineries Limited vide order dated 9th April 2001.

12. **Mangalore Refinery and Petrochemicals Limited (MRPL)**

HCU-I Hydro Cracker Unit-I Catalyst was successfully regenerated and reloaded in April, 2001.

1% Benzene MS was despatched for the first time during May, 2001.

Refinery was conferred star trading house status in September, 2001.

LVFO (80 CST) despatched for the first time from the Refinery in November, 2001.

ENCON award was conferred to MRPL in December, 2001 by Ministry of Power.

Jetty 11 was made ready for commissioning.

ISO 14000 pre audit completed in February, 2002.

Naphtha was exported for the first time in January, 2002.

HCUI (Hydro Cracker Unit-I) processed 108.45 TMT of VGO in the month of March 2002 which is ever highest in a month, from the date of inception.

Highest crude 708.65 TMT was processed in the month of March 02 (previous highest was 661.6 TMT in Oct. 01).

13. **Reliance Industries Limited (RIL)**

Crude intake of RPL was 28.96 MMT representing capacity utilisation of around 107% during 2001-02.

Export of petroleum products in 2001-02 stood at 8.6 MMT value Rs. 7230 crores (US$ 1.482 billion). With such exports RIL (RPL) was adjudged India's largest manufacturer exporter.

RIL (RPL) was granted marketing rights for sale of ATF in the domestic market.

14. **Mahanagar Gas Limited (MGL)**

Major milestone of 1.00 lakh domestic connections and 1.50 lakhs domestic registration were achieved during the financial year.

Over 53,000 domestic consumers were connected during the year alone as compared to 20,000 consumers in the previous year. Similarly, 28 Kms. of Steel pipeline and 375 Kms Polyethlene pipeline were laid during the year. Over 13,500 additional vehicles were coverted to CNG as compared to 9,200 vehicles in the previous year. The sale of gas has gone up to 4,20,000 SCM per day from 2,58,700 SCM per day in the previous year.

The Company has achieved ISO-9002; 1994 accreditation for Operations & Maintenance of Piped and Compressed Natural Gas by Det Norkse Veritas, Netherlands, a leading international certification body in oil & gas sectors.

MGL has singed contracts for supply of gas to 76 commercial consumers and 5 small industrial consumers for over 70,000 SCM per day.

15. **Indraprastha Gas Limited (IGL)**

The number of CNG stations has increased from 68 during 2000-01 to 94 in 2001-02 and the compressors have also increased to 53 nos. in 2001-02 from 24 during last year.

The compression capacity increased from 1.92 lakh kg. per day as on 31.3.01 to 6.04 lakh kg. per day as on 31.3.02.

The registered consumers and consumers connected for PNG were increased by 9,958 and 2,207 respectively during the year 2001-02. Small commercial and large commercial connections for PNG also increased by 20 and 1 respectively during 2001-02.

The CNG sales increased from 4,765 Kgs per day in 2000-01 to 266978 kgs per day during 2001-02.

The PNG sales increased from 14658 SCM per day in 2000-01 to 15836 SCM per day during 2001-02.

16. **Engineers India Limited (EIL)**

Completed FCC (Fluidised Catalystic Cracker) Unit at Haldia (2.5 months ahead of schedule).

Gasoline Production facilities at Jabel Ali Free Zone, Dubai (4 months ahead of schedule) and LPG Plant of GAIL at Gandhar (Gujarat) (3.5 months ahead of schedule) completed.

3rd Stream of NALCO Alumina Refinery Expansion Project (About 2 months ahead of schedule) and Bombay High North Clamp-on-Project on turnkey basis of ONGC (2 months ahead of schedule) were completed.

Completed gas pipeline project for LANCO Power Project in GAIL.

Completed Jhannore-Gandhar Pipeline Project and KG Basin Phase III Pipeline of GAIL.

HBJ Pipeline Upgradation Project of GAIL, Mumbai-Manmad Pipeline Extension of BPCL, Mundra to Bathinda Crude Oil Pipepline Project of HPCL, PMC Services for Para-Zylene & PTA project of IOC at Panipat, Hydrocracker Unit of BPCL and The Mumbai High Clamp-on Structures Project on turnkey basis were secured during the year.

Secured the largest MNW platform project of ONGC on turnkey basis (Rs. 821 crores).

The N11 & N12 LSTK project of ONGC on turnkey basis comprising of two wellhead platforms, new 55.9 Kilometres pipeline segments, topside modifications etc. (value Rs. 407 crores) has been secured against stiff international competition.

Outside India, EIL secured several assignments in Algeria, Kuwait, Qatar, Abu Dhabi, Indonesia etc. the notable being Development of Engineering Capabilities for Sonatrach, Algeria and extension of contract for technical assistance to NPCC, Abu Dhabi.

Research and development projects like:

(i) Process for LPG Recovery from LNG developed.

(ii) Zeolite Technology developed at CSMCRI upscaled, and

(iii) Four patents have been applied for and other two are under preparation.

* *

MINISTRY OF PETROLEUM AND NATURAL GAS

ORDER

New Delhi, the 11th May, 2001

G.S.R. 338(E).—In pursuance of clause 4 of the Naptha (Acquisition, Sale, Storage and Prevention of Use in Automobile) Order, 2000, the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas,as the authority to exercise the powers of search and seizure under the said Order.

[F. No. P-11013/1/2000-Dist.].
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 339 (E).—In pursuance of clause 4 of the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of Use in Automobile) Order, 2000, the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex Lodhi Road, New Delhi established by the MInistry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F. No. P-11013/4/98-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 340(E).— In pursuance of clause 9 of the Petroleum Products (Maintenance of Production Storage and Supply) Order, 1999 the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F. No. P-11013/2/97-Dist.].
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 341(E).— In pursuance of clause 4 of the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998, the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F. No. P-11013/2/97-Dist.].
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 342(E).— In pursuance of clause 9 of the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993, the CentralGovernment hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

(F. No. P-11013/3/93-Dist.].

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 343(E).—In pursuance of clause 13 of the Liquefied Petroleum Gas (Regulation of Supply and Distribution) Order, 2000, the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F. No. P-17011/25/97-Dist.].

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 11th May, 2001

G.S.R. 344(E).— In pursuance of clause 8 of the Lubricating Oils and Greases (Processing, Supply and Distribution Regulation) Amendment Order, 1987, the Central Government hereby authorises the Director General (Anti-Adulteration Cell), Oil Coordination Committee, Scope Complex, Lodhi Road, New Delhi, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

(F. No. P-17011/25/97-Dist.].

S. VIJAYARAGHAVAN, Jt. Secy.

MINISTRY OF PETROLEUM AND NATURAL GAS

ORDER

New Delhi, the 24th August, 2001

G.S.R. 618(E)—In pursuance of clause 4 of the Naptha (Acquisition, Sale, Storage and Prevention of use in Automobiles) Order, 2000, the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-11013/1/2000-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 619(E).—In pursuance of clause 4 of the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of use in Automobiles) Order, 2000, the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-11013/4/1998-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 620(E)—In pursuance of clause 9 of the Petroleum Products (Maintenance of Production, Storage and Supply) Order, 1999, the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-11013/2/1997-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 621(E).—In pursuance of clause 4 of the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998, the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-11013/1/1997-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 622(E)—In pursuance of clause 9 of the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993, the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-11013/3/1993-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 623(E)—In pursuance of clause 13 of the Liquified Petroleum Gas (Regulation of Supply and Distribution) Order, 2000 the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-17011/25/1997-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

ORDER

New Delhi, the 24 August, 2001

G.S.R. 624(E)—In pursuance of clause 8 of the Lubricating Oils and Greases (Processing, Supply and Distribution Regulation) Order, 1987 the Central Government hereby authorises the following Officers of the Anti-Adulteration Cell, Oil Coordination Committee, established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order:—

(1) Regional Directors

(2) Deputy Directors

(3) Assistant Directors

[File No. P-17011/25/1997-Dist.]

S. VIJAYARAGHAVAN, Jt.Secy.

GAZETTE OF INDIA (EXTRAORDINARY)
PART II, SECTION 3, SUB-SECTION (I)

MINISTRY OF PETROLEUM AND NATURALGAS

ORDER

New Delhi, the 29th October, 2001

G.S.R. 814(E).—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order to amend the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998, namely:—

1. (1) This Order may be called the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Amendment Order, 2001.

(2) It shall come into force on the date of its publication in the Official Gazette.

2. In clause 2 of the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order 1998, (hereinafter refered to as the said order)—

(i) in sub-clause (a), the words "or as may be specified by the Central Government, as the case may be" shall be inserted at end;

(ii) in sub-clause (d), after the words,letters and figures "Bureau of Indian Standards Specification No. IS-1460, the words" or the specifications laid down by the Central Government, as the case may be" shall be inserted;

(iii) in clause (f), after the words, letters and figures "Bureau of Indian Standards Specification No. IS - 2796," the words, "or the specifications laid down by the Central Government as the case may be" shall be inserted;

(iv) in sub-clause (r), the words, "or the specifications laid down by the Central Government, as the case may be" shall be inserted at the end.

3. In clause 3 of the said Order,—

(i) in item (b) of sub-clause (iii), after the word and figure "Schedule I," the words "or the specifications laid down by the Central Government, as the case may be" shall be inserted;

(ii) in sub-clause (v), after the word and figure "Schedule I", the words "or the specifications laid down by the Central Government, as the case may be" shall be inserted.

4. In clause 5 of the said Order,—

(i) in sub-clause (1), the words "or the specifications laid down by the Central Government, as the case may be" shall be inserted the end;

(ii) in sub-clause (5), the words" o e specifications laid down by the Central Government, as the case may be" shall be inserted at the end.

[F. No. P-11013/6/2001-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

Foot Note: The principal Order was published in Part II, Section 3(i) of Gazette of India vide GSR No. 772(E), dated the 28th December, 1998.

GAZETTE OF INDIA (EXTRAORDINARY)
PART II, SECTION 3, SUB-SECTION (I)

MINISTRY OF PETROLEUM AND NATURALGAS

ORDER

New Delhi, the 2nd November, 2001

G.S.R. 833(E).—In pursuance of clause 4 of the Naphtha (Acquisition Sale, Storage and Prevention of Use in Automobiles) Order, 2000 the Central Government hereby authorises the following officers of the Indian Oil Corporation Limited, Hindustan Petroleum Corporation Limited, Bharat Petroleum Corporation Limited and IBP Compnay Limited, as the authority to exercise powers of search and seizure under the said order:—

(1) General Manager

(2) Deputy General Manager

(3) Divisional Manager

(4) Regional Manager

(5) Senior Manager

(6) Deputy Manager

(7) Senior Sales Officer

(8) Sales Officer

[F. No. P-11013/1/2000-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 2nd November, 2001

G.S.R. 834(E).—In pursuance of clause 4 of the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of use in Automobiles) Order, 2000, the Central Government hereby authorises the following officers of the Indian Oil Corporation Limited, Hindustan PetroleumCorporation Limited, Bharat Petroleum Corporation Limited and IBP Company Limited, as the authority to exercise powers of search and seizure under the said order:—

(1) General Manager

(2) Deputy General Manager

(3) Divisional Manager

(4) Regional Manager

(5) Senior Manager

(6) Deputy Manager

(7) Senior Sales Officer

(8) Sales Officer

[F. No. P-11013/4/98-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 2nd November, 2001

G.S.R. 835(E).—In pursuance of clause 9 of the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993, the Central Government hereby authorises the following officers of the Indian Oil Corporation Limited, Hindustan Petroleum Corporation Limited, Bharat Petroleum Corporation Limited and IBP Company Limited, as the authority to exercise powers of search and seizure under the said order:—

(1) General Manager

(2) Deputy General Manager

3) Divisional Manager

(4) Regional Manager

(5) Senior Manager

(6) Deputy Manager

(7) Senior Sales Officer

(8) Sales Officer

[F. No. P-11013/3/93-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 2nd November, 2001

G.S.R. 836(E).—In pursuance of clause 13 of the Liquified Petroleum Gas (Regulation of Supply and Distribution), Order, 2000 the Central Government hereby authorises the following officers of the Indian Oil Corporation Limited, Hindustan Petroleum Corporation Limited, Bharat Petroleum Corporation Limited and IBP Company Limited, as the authority to exercise powers of search and seizure under the said order:—

(1) General Manager

(2) Deputy General Manager

(3) Divisional Manager

(4) Regional Manager

(5) Senior Manager

(6) Deputy Manager

(7) Senior Sales Officer

(8) Sales Officer

[F. No. P-17011/25/97-Mkt.]
S. VIJAYARAGHAVAN, Jt. Secy.

Ministry of Petroleum and Natural Gas

ORDER

New Delhi, the 21st November, 2001

G.S.R. 856(E).--In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following order to amend the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of Use in Automobiles) Order, 2000, namely:-

1. (1) This Order may be called the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of Use in Automobiles) Amendment Order, 2001.

(2) It shall come into force on the date of its publication in the Official Gazette.

2. In the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of Use in Automobiles) Order, 2000-

(i) In clause 2,-

(a) after sub-clause (g), the following shall be inserted, namely:—

"(gg) 'Schedule' means the Schedule appended to this Order."

(b) for clause (i), the following, clause shall be substituted, namely:—

"(i) 'Solvent' means volatile fractions derived either directly or indirectly from petroleum or coal and are included in the Schedule."

(ii) In clause 3, for sub-clause (1), the following shall be substituted, namely:—

"(1) No person shall either acquire, store or sell solvents included in the Schedule, without a licence issued by the State Government or the District Magistrate or any other officer authorised by the Central or the State Government:

Provided that no such licence shall be required for consumption of 50 KLs per month or less and storage of 20 KLs or less of solvents listed in the Schedule combined."

(iii) After clause (6), the following clause shall be inserted, namely:—

"6A Amendment to Schedule.-The Central Government may amend the Schedule by notification published in the Official Gazette."

(iv) After clause 7, the following 'Schedule' shall be inserted, namely:—

'SCHEDULE

[Please see sub-clause (gg) and (i) of clause 2]

(1) SBP spirits/SBP solvents

(2) C-9 solvents/raffinates

(3) C-6 raffinates

(4) Pentane

(5) Cixon

(6) Solvent 90

(7) Hexane

(8) Heptane

(9) Resol

(10) NGL

(11) MTO

(12) Aromex

(13) Iomex

(14) Furnace Oil (FO)

(15) Light Diesel Oil (LDO)"

[F. No. P-39014/2/2000-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

Foot Note : The Principal Order was published in Part II, Section 3(i) of the Gazette of India vide GSR 519(E), dated 5th June 2000.

GAZETTE OF INDIA (EXTRAORDINARY)

PART II, SECTION 3, SUB-SECTION (I)

MINISTRY OF PETROLEUM AND NATURAL GAS

ORDER

New Delhi, the 17th January, 2002

G.S.R. 41(E).—In pursuance of clause 13 of the Liquified Petroleum Gas (Regulation of Supply and Distribution) Order, 2000, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy

ORDER

New Delhi, the 17th January, 2002

G.S.R. 42(E).—In pursuance of clause 9 of the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 17th January, 2002

G.S.R. 43(E).—In pursuance of clause 4 of the Solvent, Raffinate and Slop (Acquisition, Sale, Storage and Prevention of Use in Automobiles) Order, 2000, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 17th January, 2002

G.S.R. 44(E).—In pursuance of clause 4 of the Naphtha (Acquisition, Sale, Storage and Prevention of Use in Automobiles) Order, 2000, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 17th January, 2002

G.S.R. 45(E).—In pursuance of clause 8 of the Lubricating Oils and Greases (Processing, Supply and Distribution Regulation) Order, 1987, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 17th January, 2002

G.S.R. 46(E).—In pursuance of clause 4 of the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]
S. VIJAYARAGHAVAN, Jt. Secy.

ORDER

New Delhi, the 17th January, 2002

G.S.R. 47(E).—In pursuance of clause 9 of the Petroleum Products (Maintenance of Production, Stroage and Supply) Order, 1993, the Central Government hereby authorises the Joint Directors of the Anti Adulteration Cell established by the Ministry of Petroleum and Natural Gas, as the authority to exercise the powers of search and seizure under the said Order.

[F.No. P-11013/3/2001-Dist.]

S. VIJAYARAGHAVAN, Jt. Secy.

GAZETTE OF INDIA (EXTRAORDINARY)

PART II, SECTION 3, SUB-SECTION (ii)

MINISTRY OF PETROLEUM AND NATURAL GAS

ORDER

New Delhi, the 22nd March, 2002

S.O. 328(E).—In pursuance of rule 200 of the Petroleum Rules, 1976, the Central Government on the recommendation of the Chief Controller hereby extends the exemption granted from the provisions of rule 16 for a further period of one year and for that purpose makes the following amendment in the notification of the Government of India in the Ministry of Petroleum and Natural Gas, number S.O. 183(E) dated the 23rd March, 1999, namely:—

In the said notification, in paragraph 1; for the words "three years", the words "four years" shall be substituted.

[F.No. P-23011/47/98-Sup]

A. K. DUBEY, Director

Note.—The Petroleum Rules, 1976 were published in the Gazette of India vide number GSR 479(E) dated 30th June, 1976 and amended from time to time and lastly amended vide S.O. 1254(E) dated 22nd December, 2001.

I.3 PROGRESS OF INDIAN PETROLEUM INDUSTRY 1947-48 TO 2001-02.

Year	Balance of recoverable Reserves @		Crude oil production	Natural gas Production	Refinery crude Th Put	Refinery production	Consumption of POL. Prods	Gross Imports		Net Imports		C.I.F. unit value of crude Imports	India's total Imports Exports		%age of gross POL Imports to India's Exports	Central excise Customs duties on Pol.	Index of Self Reliance
	Crude oil (MMT)	Natural gas (Bn/M3)	(MMT)	(BM3)	(MMT)	(MMT)	(MT)	Crude Pol. (MMT)	POL Products Rs. Crore)	Crude & Pol. Qty. (MMT)	Oil Products Value (Rs. Crore)	(Rs MT)	Imports (Rs. Crore)	Export		(Rs. Crore)	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1947-48	4	3	0.25	NA	0.25	0.23	2.72	-	2.36	NA	NA	NA	NA	NA	NA	NA	9
1950-51	4	2	0.26	NA	2.26	0.23	3.46	-	3.11	NA	NA	-	NA	NA	NA	NA	7
1960-61	45	22	0.45	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
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	301	735	26.95	18.1	53.48	50.36	58.90	29.25 (1068)	11.28 (6360)	26.81	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	3466	73101	69751	25.4	12223	41
1994-95	765	707	32.24	19.4	56.93	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	22.6	58.74	55.08	74.67	27.34 (11517)	20.34 (12578)	44.24	22263	4212	122678	106353	22.7	15612	44
1996-97	727	640	32.90	23.3	62.87	59.01	79.17	33.91 (18538)	20.27 (15633)	51.01	32087	5409	138920	118817	28.8	21493	39
1997-98	747	692	33.86	26.4	65.17	61.31	84.29	34.93 (15872)	22.97 (14309)	55.08	28915	4602	154176	130101	23.2	20973	37
1998-99	716	675	32.72	27.4	68.54	64.55	90.56	39.81 (14917)	23.77 (12276)	62.86	26887	3747	178332	139753	19.5	21513	34
1990-00	660	648	31.95	28.4	85.96	79.41	97.09	57.81 (40028)	16.61 (14186)	73.67	53516	6925	215236	159561	34.0	32662	31
2000-01	703	760	32.43	29.5	103.44	95.61	100.07	74.10 (65932)	9.27 (12093)	75.00	70353	8898	230873	203571	38.3	35912	30
2001-02	732	763	32.03	29.7	107.27	100.00	100.43	78.71 (60397)	7.01 (7249)	75-63	59361	7673	243645	207746	32.6	36377	30

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

Source:-PSUs, OCC, DGCI & S Calcutta and Economic Survey.

I.4 COMMODITY BALANCE OF CRUDE OIL AND PETROLEUM PRODUCTS

(Million Tonnes)

ITEM	1950-51+	1960-61+	1970-71+	1980-81	1990-91	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02*
I. Crude Oil													
1. Refinery Throughput	0.3	6.6	18.4	25.8	51.8	56.5	58.7	62.9	65.2	68.5	86.0	103.4	107.3
2. Domestic Production	0.3	0.5	6.8	10.5	33.0	32.2	35.2	32.9	33.9	32.7	31.9	32.4	32.0
a) On-shore	0.3	0.5	6.8	5.5	11.8	12.0	11.9	11.4	11.5	11.5	11.3	11.8	11.9
b) Off-shore	-	-	-	5.0	21.2	20.2	23.3	21.5	22.4	21.2	20.6	20.6	20.1
3. Imports	n.a.	6.0	11.7	16.2	20.7	27.3	27.3	33.9	34.5	39.8	45.0	74.1	78.7
4. Exports	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Net Imports (3-4)	n.a.	6.0	11.7	16.2	20.7	27.3	27.3	33.9	34.5	39.8	45.0	74.1	78.7
II. Petroleum Products													
1. Domestic Consumption@	3.3	7.7	17.9	30.9	55.0	67.5	74.8	79.2	84.3	90.6	97.1	100.1	100.4
of which													
a) Naphtha $	-	-	0.9	2.3	3.4	3.4	4.2	5.0	6.6	8.9	10.8	11.7	11.8
b) Kerosene	0.9	2.0	3.3	4.2	8.4	9.0	9.9	10.2	11.1	12.2	11.9	11.3	10.4
c) High Speed Diesel Oil	0.2	1.2	3.8	10.3	21.1	28.3	32.3	35.0	36.1	37.2	39.3	37.9	36.5
d) Fuel Oils	0.9	1.7	4.7	7.5	9.0	9.9	11.2	11.5	11.5	12.5	12.5	12.7	13.0
2. Domestic Production	0.2	5.7	17.1	24.1	48.6	52.9	55.1	59.0	61.3	64.5	79.4	95.6	100.0
of which													
a) Naphtha	n.a.	-	1.2	2.1	4.9	5.7	6.0	6.1	6.1	6.1	8.2	9.9	9.2
b) Kerosene	n.a.	0.9	2.9	2.4	5.5	5.3	5.3	6.2	6.7	5.3	5.7	8.7	9.7
c) High Speed Diesel Oil	n.a.	1.1	3.8	7.4	17.2	19.6	20.7	22.2	23.4	26.7	34.8	39.0	39.8
d) Fuel Oils	n.a.	1.6	4.1	6.1	9.4	9.8	9.6	10.3	11.1	11.0	11.4	11.4	12.2
3. Imports	3.1	2.5	1.1	7.3	8.7	14.0	20.3	20.3	19.5	23.8	16.6	9.3	7.0
4. Exports @@	n.a.	n.a.	0.3	Neg	2.7	3.3	3.4	3.2	2.9	0.7	0.7	8.4	10.1
5. Net Imports (3-4)	n.a.	n.a.	0.8	7.3	6.0	10.7	16.9	17.1	16.6	23.1	15.9	0.9	-3.1

*Provisional
+: On a calender year basis.
@Excluding refinery fuel consumption. Including import by private parties.
$: Includes NGL consumption from 1995-96 onwards.

n.a.: not available.
Neg: Negligible.
@@: Including supplies of POL Products to Nepal till 1997-98.

1.5a GROWTH OF PETROLEUM INDUSTRY IN INDIA
(Calendar year)

(000 Tonnes)

Year	Crude Oil		Petrolem Products	
	Production	Refineries	Production	Consumption
1	2	3	4	5
1960	451	6091	5747	7964
1965	3022	9754	9113	12356
1970	6809	18459	17172	18816
1980	9399	25075	23597	31633
1990	33311	51671	48402	57943
1991	31007	50954	47916	58462
1992	27874	54254	51041	62092
1993	26508	53509	50396	62836
1994	30969	56407	52872	64280
1995	35048	57971	54379	70269
1996	32986	61704	57869	76067
1997	33830	64533	60631	79464
1998	32806	66672	62809	82933
1999	32628	79538	73100	89973
2000	32124	101788	95186	90262
2001	31972	106744	98977	89650

(Rs. Crores)

Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS (Col. 8-11)
	Crude Oil	Products	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	102.36	30.53	132.89	—	5.72	5.72	127.17
1980	3038.66	1788.28	4826.94	—	17.98	17.98	4808.96
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	10251.01	21207.72	—	1728.55	1728.55	19379.17
1996	17194.53	15454.63	32649.16	—	2050.49	2050.49	30598.67
1997	17061.19	14131.47	31192.66	—	1926.84	1926.84	30099.07
1998	14513.7	10408.47	24922.24	—	1093.59	1093.59	23828.65
1999	26341.48	10056.27	36397.75	—	827.04	827.04	35570.71
2000	65879.24	7749.82	73629.06	—	1057.80	1057.80	72571.26
2001	59768	8179	67947	—	7941	7941	60006

(P) = Provisional Source : PPAc.

*Excluding Refinery Fuel.



INDIAN PETROLEUM & NATURAL GAS STATISTICS

2001-02

MINISTRY OF PETROLEUM & NATURAL GAS
ECONOMICS AND STATISTICS DIVISION
GOVERNMENT OF INDIA
NEW DELHI

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM & NATURAL GAS

FOREWORD

The Ministry of Petroleum & Natural Gas has been publishing its annual bulletin "***Indian Petroleum & Natural Gas Statistics***" containing comprehensive information on the Oil & Gas Sector, beginning from 1967 upto 2000-01. The bulletin provides information both in terms of calendar year and the financial year, to cater to the requirements of the different users. It also includes in brief the chronology of important events of the Indian Oil Sector and the control orders issued during the year. We have also introduced a section on time series data this year.

The present compilation providing data for the year 2001-02, represents the sustained efforts of the Economics & Statistics Division of the Ministry.

We would welcome suggestions to restructure the bulletin or improve it any other manner.

B K Chaturvedi

(B.K. Chaturvedi)
Secretary to the Government of India

Shastri Bhawan
New Delhi-110001
June 2003

MINISTRY OF PETROLEUM & NATURAL GAS
ECONOMICS & STATISTICS DIVISION

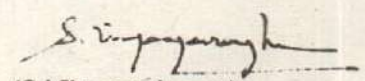
PREFACE

The Economics & Statistics Division of the Ministry of Petroleum & Natural Gas has conscientiously endeavoured to bring out its annual bulletin "***Indian Petroleum & Natural Gas Statistics***" from 1967. This has been made possible with inputs furnished by various Ministries and Departments of the Government of India, Petroleum Planning & Analysis Cell as well as the oil companies.

Part-I of the compilation deals with the Indian Petroleum Statistics, Part-II with International Petroleum Statistics, Part-III with Plan Statistics (including the draft X Plan figures) and Part-IV focusses on financial performance of the oil companies. Part-V pertaining to time series data on Petroleum & Gas Statistics is a fresh addition to the bulletin.

We express our deep sense of gratitude to all the data providers to the Ministry and record our appreciation for the efforts put in by the officials of the Economics & Statistics Division viz., Ms. Pushpa Thottan, Joint Advisor, Shri Khursheed Alam, Research Officer, Sr. Investigators Shri D.C.Garg and Dr.P.G.S.Rao, Ms. Kanwaljit Kaur, Jr. Investigator and Mrs. Parvesh Goswami, UDC.

Suggestions for its improvement would be duly appreciated.



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

Shastri Bhawan
New Delhi-110001
June 2003

II.EXPLORATION

II.1 AREAWISE DEPLOYMENT OF DEEP DRILLING RIGS, WELLS & METREAGE DRILLED BY ONGC & OIL FROM 1970-71 TO 2001-02

Year	Onshore			Offshore			Total		
	Rigs	Wells (Nos.)	Metreage ('000')	Rigs	Wells (Nos.)	Metreage ('000')	Rigs	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A) OIL & NATURAL GAS COMMISSION /CORPORATION LTD.									
1970-71	31	89	168	1	—	1	32	89	168
1975.76	35	106	229	4	15	28	39	121	257
1980-81	34	72	134	7	32	78	41	104	212
1984-85	53	127	280	13	73	161	66	200	441
1989-90	115	491	971	33	134	353	148	625	1324
1990-91	108	369	777	32	139	276	140	508	1053
1991-92	110	343	745	25	83	208	135	426	953
1992-93	109	349	755	28	100	251	137	449	1006
1993-94	103	330	777	25	162	360	128	492	1137
1994-95	98	324	778	24	89	204	122	413	982
1995-96	91	328	728	21	79	163	112	407	891
1996-97	79	301	657	23	45	128	102	346	765
1997-98	76	230	512	17	58	133	93	288	645
1998-99	71	215	443	22	59	145	93	274	588
1999-00	74	228	522	20	63	146	95	291	668
2000-01	75	237	558	18	52	116	93	289	674
2001-02*	75	261	583	19	43	112	94	304	695
(B) OIL INDIA LIMITED									
1970-71	4	12	48	—	—	—	4	12	48
1975.76	3	11	36	—	—	—	3	11	36
1980-81	4	9	33	1	1	4	5	10	37
1984-85	7	25	86	1	2	10	8	27	96
1989-90	15	28	130	—	—	—	15	28	130
1990-91	13	27	112	—	—	—	13	27	112
1991-92	14	26	110	—	—	—	14	26	110
1992-93	15	19	99	—	—	—	15	19	99
1993-94	15	22	106	—	—	—	15	22	106
1994-95	14	19	88	—	—	—	14	19	88
1995-96	15	20	78	1	1	5	16	21	83
1996-97	15	24	102	1	1	3	16	25	105
1997-98	16	19	110	—	—	—	16	19	110
1998-99	16	19	97	—	—	—	16	19	97
1999-00	16	16	90	—	—	—	16	16	90
2000-01	16	25	89	—	—	—	16	25	89
2001-02*	16	22	97	—	—	—	16	22	97
TOTAL (A+B)									
1970-71	35	101	216	1	—	1	36	101	216
1975.76	38	117	265	4	15	28	42	132	293
1980-81	38	81	167	8	33	82	46	114	249
1984-85	60	152	366	14	75	171	74	227	537
1989-90	130	519	1101	33	134	353	163	653	1454
1990-91	121	396	889	32	139	276	153	535	1165
1991-92	124	369	855	25	83	208	149	452	1163
1992-93	124	368	854	28	100	251	152	468	1105
1993-94	118	352	883	25	162	360	143	514	1243
1994-95	112	343	866	24	89	204	136	432	1070
1995-96	106	348	806	22	80	168	128	428	974
1996-97	94	325	759	24	46	131	118	371	890
1997-98	92	249	622	17	58	133	109	307	755
1998-99	87	234	540	22	59	145	109	293	685
1999-00	90	244	612	21	63	146	111	307	758
2000-01	91	252	647	18	62	116	109	314	763
2001-02*	91	283	680	19	43	112	110	326	792

Provisional

Source: PSUs.

II. 2 EXPLORATORY & DEVELOPMENT DRILLING BY ONGC & OIL

Year	Exploratory		Development		Total	
	Wells* (Nos.)	Metreage ('000')	Wells ('000')	Metreage ('000')	Wells (Nos.)	Metreage ('000')
1	2	3	4	5	6	7
		(A) ON SHORE				
1970-71	51+1P	106	50+3P	112	101+3P	218
1975-76	49+1P	120	68+1P	145	117+2P	265
1980-81	44+1P	96	38+2P	71	82+3P	167
1984-85	70+5P	186	82+1P	180	152+6P	366
1989-90	204	508	315	593	519	1101
1990-91	176	434	220	455	396	889
1991-92	176	454	193	401	369	855
1992-93	172	413	196	441	368	854
1993-94	147	374	205	509	352	883
1994-95	162	428	181	438	343	866
1995-96	177	427	171	334	348	761
1996-97	171	407	156	355	327	762
1997-98	114	297	135	326	249	623
1998-99	110	273	124	267	234	540
1999-00	123	337	121	275	244	612
2000-01	124	331	132	316	256	647
2001-02	140	380	143	300	283	680
		(B) OFFSHORE				
1970-71	-	1	-	-	-	1
1975-76	10	19	5	9	15	28
1980-81	15+1P	40	18	42	33+1P	82
1984-85	20+1P	62	51	109	71+1P	171
1989-90	61	160	73	193	134	353
1990-91	73	184	66	92	139	276
1991-92	61	167	22	41	83	208
1992-93	69	176	31	75	100	251
1993-94	33	96	129	264	162	360
1994-95	48	116	41	88	89	204
1995-96	27	77	52	86	79	163
1996-97	28	80	18	48	46	128
1997-98	20	50	38	82	58	132
1998-99	25	60	34	85	58	145
1999-00	28	87	35	59	63	146
2000-01	30	68	22	48	52	116
2001-02	15	45	28	67	43	112
		TOTAL				
1970-71	52+1P	107	50+3P	112	101+3P	218
1975-76	59+1P	139	73+1P	154	132+2P	293
1980-81	59+2P	136	56+2P	113	115+4P	249
1984-85	90+6P	248	133+1P	289	223+7P	537
1989-90	265	668	388	786	653	1454
1990-91	249	618	286	547	535	1165
1991-92	237	621	215	442	452	1063
1992-93	241	589	227	516	468	1105
1993-94	180	470	334	773	514	1243
1994-95	210	544	222	525	432	1070
1995-96	204	504	223	470	427	924
1996-97	199	487	174	403	373	890
1997-98	334	347	173	408	307	755
1998-99	135	333	158	352	293	685
1999-00	151	424	156	334	307	758
2000-01	154	399	154	364	308	763
20001-02*	155	425	171	367	326	792

(P) Partly Drilled. *Provisional Source: PSus.

II. 3 STATUS OF WELLS
(As on 1st April of each Year)

(NUMBERS)

COMPANY YEAR	OIL	GAS	DRY	UNDER TEST	INJEC-TION	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
1985	438	4	305	7	7	247	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
1998	693	-	305	-	-	3	1001
1999	693	-	305	-	-	3	1001
2000	693	-	305	-	-	3	1001
2001	693	-	305	-	-	3	1001
2002*	693	-	305	-	-	3	1001
			(B OIL INDIA LIMITED				
1975	250	18	34	27	20	-	349
1980	273	26	40	48	34	-	421
1985	321	42	49	35	50	31	528
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
1998	642	97	97	-	50	54	940
1999	654	100	100	-	50	60	965
2000	695	100	107	-	47	54	1003
2001	719	104	109	-	46	54	1032
2002	659	95	151	52	47	52	1056
			(C) OIL & NATURAL GAS CORPORATION LTD.				
1975	605	79	320	141	28	-	1173
1980	951	123	487	125	32	-	1718
1985	1434	170	659	216	67	-	2546
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
1998	3841	488	2090	67	628	627	7741
1999	3799	522	2145	59	634	857	8016
2000	3939	548	2178	75	659	906	8305
2001	4072	552	2266	68	690	940	8588
2002	4265	575	2390	70	852	734	8885
			(TOTAL) (A+B+C)				
1975	1282	104	354	168	53	612	2523
1980	1641	159	527	173	72	568	3140
1985	2186	216	1011	258	124	278	4073
1990	3254	356	1499	105	267	808	6289
1991	3462	390	1656	325	285	717	6835
1992	3598	383	816	200	385	1036	7417
1993	3762	412	1959	212	438	1085	7838
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
1998	5176	585	2492	67	678	684	9682
1999	5146	622	2551	59	684	920	9982
2000	5327	648	2590	75	706	963	10309
2001	5484	656	2680	68	737	997	10621
2002*	5617	670	2846	122	899	789	10942

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

II. 4 STATEWISE GEOLOGICAL SURVEYS ACHIEVEMENTS UPTO 31.3.2002

(Sq. Km.)

States	Geological Surveys
1	2
Andhra Pradesh	53427
A.N. Island	6860
Arunachal Pradesh	3692
Assam	49249
Bihar	4035
Gujarat (Gulf of Cambay)	60625
Haryana	covered
Himachal Pradesh	9530
Jammu & Kashmir	22970
Kerala-Karnataka (incl. Goa)	4000
Madhya Pradesh	44451
Manipur	2781
Maharashtra	-
Meghalaya	1911
Mizoram	6134
Nagaland	6971
Orissa	-
Punjab	covered
Rajasthan	44691
Sikkim	720
Tamil Nadu (incl Pondicharry)	20003
Tripura	21263
Uttar Pradesh	29797
West Bengal	8806

Source: ONGC and OIL

II. 5 STATEWISE ACHIEVEMENTS OF GEOPHYSICAL FIELD PARTIES IN INDIA SINCE INCEPTION UPTO 31.3.2002

Area/State	Departmental			Contract
	2D		3D	2D
	SLK	GLK	SQK	GLK
1	2	3	4	5
OIL INDIA LTD.				
(A) ONSHORE				
Assam	36092	2978	1250	2362
Arunachal Pradesh	1789	34	0	495
Rajasthan	0	0	300	11923
Orissa	0	0	0	3814
Ganga Valley (U.P.)	0	0	0	5078
Total (A)	**37881**	**3012**	**1550**	**23672**
(B) OFFSHORE	LK			
Orissa	13842			
Andaman	201			
Saurashtra	18836			
Total(B)	**32879**			

OIL & NATURAL GAS CORPORATION LTD.

	2D	3D	
	GLK	GLK	Sk
(A) ONSHORE			
Andhara Pradesh	36226	15922	1290
Assam	29671	16098	1605
Bihar	6566	0	0
Gujarat	101701	49990	2478
Himachal Pradesh	3532	0	0
Haryana	1038	0	0
Jammu & Kashmir	2563	0	0
Madhya Pradesh	9291	0	0
Mizoram	35	0	0
Nagaland	558	0	0
Meghalaya	204	0	0
Orissa	313	0	0
Punjab	4078	0	0
Rajasthan	20489	0	0
Tamil Nadu	39127	15709	1191
Tripura	4627	0	0
Uttar Pradesh (Ganga Valley)	28551	0	0
West Bengal@	29243	4217	210
Total Onshore	**317813**	**101936**	**6774**
(B) OFFSHORE	**2D (LK)**	**3D (LK)**	
West Coast	435101	698540	
East Coast	124284	64566	
Total Offshore	559385	763105	

@In addition to above, 67Sq. Km of 3D data has been acquired on contractual basis.

GLK: Ground Line Kilometre. LK: Line Kolometre SLK: Standard Line Kolometre.

SQK: Square Kolometre. Source:OIL/ONGC.

II.6 BASINWISE/STATEWISE ACHEIVEMENTS OF DRILLING SINCE INCEPTION UPTO 31.3.2002

Basin	State/Region	Wells Numbers	Metreage ('000')
1	2	3	4
A. Onshore			
Cambay	Gujarat	4865	8469
Rajasthan	Rajasthan	75	139
Kutch-Saurashtra	Madhya Pradesh	3	12
Gulf of Cambay	Gulf of Cambay	4	8
	Total WRBC	**4947**	**8628**
Upper Assam	Assam (Including Nagaland & Meghalaya)	2223	7453
Assam-Arakan	Arunachal Pradesh	56	137
Fold Belt	Mizoram under ERBC	1	3
	Total ERBC	**2280**	**7593**
Assam-Arakan	Tripura	102	290
Foot hills &	West Bengal	30	121
Ganga Valley	Bihar	6	30
	Orissa	46	98
	Mizoram under CRBC	1	3
	Total CRBC	**185**	**542**
Himalayan Foot-hills	Himachal Pradesh	10	42
Ganga Valley &	Punjab	4	16
Vindhyan/Gondwana	Uttar Pradesh	8	27
	Madhya Pradesh under NRBC	1	4
	Jammu & Kashmir	4	12
	Total NRBC	**27**	**101**
Krishna-Godavari	Andhra Pradesh	340	1033
Cauvery	Tamil Nadu	402	1027
	Total SBRC	**742**	**2060**
Total Onshore		**8181**	**18924**
B. Offshore			
East Coast	East Coast including KG, Cauvery Andaman Offshore and Bengal Offshore	177	571
West Coast	West Coast including drilling in deep water, Kerala-Kondan and Kutch-Saurashtra	1764	4032
B. Total Offshore		**1941**	**4603**
Total(A+B)		**10122**	**23527**

Source: PSU's

II. 7 STATE-WISE/BASIN-WISE OIL AND GAS FIELDS IN INDIA AS ON 1.4.2002

(Number)

Company/State	Basin	Oil Fields	Gas Fields	Oil and Gas Fields	Total Fields
1	2	3	4	5	6
A. OIL & NATURAL GAS CORPN. LTD.					
(a) Onshore					
Gujarat	Cambay	79	11	0	90
Assam	Upper Assam	24	1	0	25
	AAFB	2	3	5	10
Nagaland	AAFB	3	0	0	3
Rajasthan	Jaisalmer	0	6	0	6
Andhra Pradesh	K.G. Basin	8	33	0	41
Tamil Nadu	Cauvery	16	10	0	26
Tripura	AAFB	0	6	0	6
(B) OFFSHORE					
East Coast	Andaman	0	1	0	1
	K.G. Basin	6	4	0	10
	Cauvery	3	0	1	4
West Coast	Mumbai Ofshore	54	28	0	82
	Kutch	1	3	0	4
	Cambey	2	0	0	2
B. Oil India Ltd.					
Assam	Upper Assam Basin	0	0	8	8
Arunachal Pradesh	Upper Assam Basin	0	0	2	2
	Jaisalmer Basin	0	3	0	3
	Bikaner Nagaur Basin	1	0	0	1*
C. Private/JVCs					
(a) Onshore					
Gujarat	Cambay	0	2	18	20
Arunachal Pradesh	AAFB	0	0	1	1
(b) Offshore					
East Coast	Py-1/Ravva	0	2	2	4
West Coast	MS Tapti	0	2	0	2
	Panna Mukta	0	0	2	2
Total		**199**	**115**	**39**	**353**

AAFB: Assam Arakan Fold Belt.

Source: ONGC, Oil and DGH.

*: Heavy Oil

III. CRUDE OIL

III. 1. RESERVES@ OF CRUDE OIL IN INDIA

(Million Tonnes)

Year	Gujarat	Assam[1]	Andhra Pradesh	Tamil Nadu	Wester[2] Offshore	Eastern[3] Offshore	Grand Total
1	2	3	4	5	6	7	8
1996	62.73	90.27	-	-	-	-	153.00
1970	56.38	71.46	-	-	-	-	127.84
1975	45.72	84.41	-	-	13.77	-	143.90
1980	52.73	82.45	-	-	230.95	-	366.13
1985	86.61	101.80	-	-	311.10	-	499.51
1990	161.69	144.97	-	-	432.14	-	738.80
1995	154.60	150.01	1.38	3.63	414.30	7.79	731.71
1996	154.27	146.29	1.54	4.31	419.85	2.42	728.68
1997	151.70	150.71	1.66	4.47	436.11	2.42	747.07
1998	150.21	154.05	2.04	4.79	404.20	1.08	716.37
1999	146.36	154.14	2.79	5.03	339.00	13.00	660.32
2000	147.90	159.79	3.13	5.76	349.88	36.05	702.51
2001	145.10	163.86	3.68	5.78	353.89	53.91	732.22
2002	148.09	173.78	3.77	5.97	375.53	33.41	740.55

@ : Proved and indicated Balance Recoverable Reserves.
[1] : Includes Nagaland, Tripura and Arunachal Pradesh reserves of crude oil and natural gas.
[2] : Includes Bombay High offshore and JVC.
[3] : Includes JVC/Pvt. Parties.

Source : ONGC/Oil and DGH.

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

('000' Tonnes)

Year	On Shore					Off Shore		Grand Comulative	
	AOC	OIL	JVC	ONGC	Total	ONGC	JVC	Total Production	
1	2	3	4	5	6	7	8	9	10
1950	259	-	-	-	259	-	-	259	6598
1955	272	75	-	-	347	-	-	347	8057
1960	179	272	-	-	451	-	-	451	10234
1965	158	1742	-	1122	3022	-	-	3022	18711
1970	107	3074	-	3632	6813	-	-	6813	48410
1975	68	3087	-	5128	8283	-	-	8283	85939
1980	41	796	-	4033	4870	4529	-	9399	138292
1985	-	2635	-	6580	9215	20645	-	29860	255892
1990	-	2697	-	9294	11991	21320	-	33311	415767
1991	-	2580	-	9033	11613	19394	-	31007	446774
1992	-	2486	-	8779	11265	16609	-	27874	747648
1993	-	2738	-	8688	11426	15082	-	26508	501156
1994	-	2898	-	9107	12005	18900	64	30969	532125
1995	-	2867	17	9050	11934	22656	458	35048	567173
1996	-	2858	36	8641	11535	20526	925	32986	600159
1997	-	3040	40	8388	11468	20088	2274	33830	633989
1998	-	3246	66	8215	11527	18605	2674	32806	666795
1999	-	3298	95	7878	11271	17371	3989	32628	699423
2000	-	3269	81	8320	11670	16474	3980	32124	731547
2001	-	3257	72	8613	11942	15988	4042	31972	763519

(a) = Following the take over of AOC by Govt. in Oct. 1981, the production figures shown under AOC are upto 14th October 1981, thereafter the same have been merged with OIL
Source: PSU/JVC.

III. 3 COMPANY-WISE PRODUCTION OF CRUDE OIL IN INDIA (FINANCIAL YEAR)

(0000 Tonnes)

Year	On Shore					Off Shore		Grand Total	Comulative Production
	AOC	OIL	ONGC	JVC	Total	ONGC	JVC		
1	2	3	4	5	6	7	8	9	10
1970-71	104	3084	3684	-	6872	-	-	6872	50303
1975-76	66	3103	5279	-	8448	-	-	8448	88244
1980-81	48	1243	4231	-	5522	4985	-	10507	141811
1985-86	-	2654	6691	-	9345	20823	-	30168	264246
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	4	12017	20226	251	32494	541047
1995-96	-	2882	8971	26	11879	22665	624	35168	576215
1996-97	-	2870	8504	38	11412	20181	1307	32900	609115
1997-98	-	3094	8387	42	11523	19863	2472	33858	642973
1998-99	-	3295	8100	77	11472	18286	2965	29722	675695
1999-2000	-	3283	7921	94	11298	16727	3924	31949	707644
2000-01	-	3286	8428	78	11792	16629	4005	32426	740070
2001-02*	-	3183	8635	71	11889	16073	4070	32032	772102

*Provisional

(a) = After takeover of AOC by Govt. in Oct. 1981 the production figures shown under AOC are upto 14th October 1981. Thereafter the same have been merged with OIL.

Source : PSU/JVC.

III. 4 STATE-WISE PRODUCTION OF CRUDE OIL IN INDIA

('000 Tonnes)

Year	ON SHORE				OFF SHORE			Grand Total
	Arunachal Pradesh	Tamil Nadu/ Andhra Pradesh	Assam/ Nagaland	Gujarat	Total	Andhra Pradesh/ Tamil Nadu	Bombay High	
1	2	3	4	5	6	7	8	9
A. CALENDAR YEARS								
1970	-	-	3359	3450	6809	-	-	6809
1975	-	-	4189	4094	8283	-	-	8283
1980	2	-	1058	3812	4870	-	4329	9399
1985	60	-	4879	4576	9215	-	20645	29850
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	64	18900	32970
1995	27	491	5038	6318	11934	458	22656	35048
1996	36	390	4834	6278	11538	925	20528	32989
1997	27	374	5070	5998	11469	2274	20088	33831
1998	34	422	5273	5946	11692	2674	18606	32972
1999	45	504	5002	5720	11271	3979	17378	32628
2000	34	631	5185	5820	11670	3980	16474	32124
2001	27	746	5151	6018	11942	4042	15988	31972
B. FINANCIAL YEARS								
1970-71	-	-	3367	3455	6822	-	-	6822
1975-76	-	-	4300	4148	8448	-	-	8448
1980-81	2	-	1712	3808	5522	-	4985	10507
1985-86	60	-	4966	4319	9345	-	20823	30168
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	6283	12017	551	20226	32494
1995-96	28	418	5046	6386	11878	824	22665	35167
1996-97	36	381	4811	6184	11412	1307	20181	32900
1997-98	25	390	5130	5978	11523	2472	19863	33858
1998-99	38	449	5125	5860	11472	2965	18285	32723
1999-2000	44	523	5028	5703	11298	3924	16727	31949
2000-01	31	700	5201	5863	11795	4004	16627	32426
2001-02*	27	723	5098	6043	11891	4068	16073	32032

*Provisional

IV. NATURAL GAS

IV. 1 RESERVES @ OF NATURAL GAS IN INDIA

(Billion Cubic Metres)

Year	Gujarat[1]	Assam[2]	Andhra Pradesh	Tamil Nadu	Western Offshore[3]	Eastern Offshore[4]	Grand Total
1	2	3	4	5	6	7	8
1966	23.09	40.06	-	-	-	-	63.15
1970	19.66	42.82	-	-	-	-	62.48
1975	16.15	65.24	-	-	6.28	-	87.67
1980	16.82	63.53	-	-	270.96	-	351.31
1985	22.41	87.67	-	-	368.55	-	478.63
1990	93.62	135.47	-	-	457.36	-	686.45
1995	93.99	125.59	29.84	4.74	414.65	7.30	676.11
1996	91.06	131.39	34.40	7.29	374.18	2.99	641.31
1997	89.11	133.81	35.50	9.99	388.05	35.60	692.06
1998	88.68	137.93	35.77	14.04	362.04	36.30	674.76
1999	84.35	142.19	37.35	15.54	363.65	4.88	647.96
2000	85.74	152.87	39.52	20.62	447.48	13.58	759.81
2001	83.51	156.29	39.65	21.95	442.58	18.97	762.95
2002	96.13	156.65	40.36	22.04	402.53	33.02	750.73

@: Proved and indicated Balance Recoverable Reserves.
[1]: Includes Rajasthan reserves of natural gas.
[2]: Includes Nagaland, Tripura and Arunachal Pradesh reserves of natural gas.
[3]: Includes Bombay High offshore and JVC.
[4]: Includes JVC/Pvt. Parties.
*Provisional

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

(Million Cubic Metres)

Year	Gujarat	ON SHORE				OFF SHORE		Grand Total
		Assam/ Nagaland	Arunachal Pradesh	Tripura/Rajasthan/ T. Nadu & Andhra Pradesh	Total	JVC High	Bombay	
1	2	3	4	5	6	7	8	9
				A. CALENDER YEARS				
1970	458	996	-	-	1424	-	-	1424
1975	760	1550	-	-	2310	-	-	2310
1980	868	621	-	-	1489	-	588	2077
1985	884	2049	4	-	2937	-	4971	7908
1990	1645	2014	27	158	3844	-	14146	17990
1991	1855	2062	31	251	4199	-	14450	18640
1992	1957	2054	49	563	4623	-	13749	18372
1993	2080	1984	49	779	4892	-	13229	18121
1994	2395	1937	39	829	5200	12	14223	19435
1995	2796	1861	33	906	5596	298	15533	21427
1996	2935	1944	25	999	5903	430	17042	23375
1997	3118	1992	23	1354	6487	1179	17630	25296
1998	3178	2059	24	1820	7081	2588	17988	27654
1999	3312	2096	24	1966	7398	3194	17380	27972
2000	3133	2210	20	2195	7558	3287	18453	29298
2001	3245	2043	24	2644	7956	3339	18333	29628
				B. FINANCIAL YEAR				
1970-71	465	980	-	-	1445	-	-	1445
1975-76	773	1595	-	-	2368	-	-	2368
1980-81	842	843	-	-	1685	-	673	2358
1985-86	919	2029	6	-	2954	-	5180	8134
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	87	14138	19468
1995-96	2887	1880	32	939	5738	325	16579	24642
1996-97	2956	948	23	1056	5983	479	16794	23256
1997-98	3175	2024	24	1461	6684	1615	18102	26401
1998-99	3279	2070	24	1795	7168	2746	17514	27428
1999-00	3271	2105	22	2005	7403	3268	17775	28446
2000-01	3150	2225	10	2340	7725	3288	18465	29478
2001-02*	3280	2022	23	2534	7859	3429	18426	29714

*Provisonal

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
		ONSHORE		
Gujarat				
1970-71	465	—	155	310
1975-76	773	—	136	637
1980-81	842	—	146	696
1985-86	919	—	118	801
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	2932	—	347	2585
1997-98	3145	—	358	2757
1998-99	3166	—	397	2769
1999-00	3096	—	412	2684
2000-01	2850	—	429	2421
2001-02*	2550	—	394	2156
Assam $				
1970-71	980	36	607	337
1975-76	1595	162	946	487
1980-81	843	67	257	519
1985-86	2035	66	887	1082
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	131	1776
1996-97	1974	—	97	1877
1997-98	2190	—	292	1898
1998-99	2242	—	313	1930
1999-00	2257	—	221	2036
2000-01	2386	—	211	2175
2001-02*	2123	—	173	1950
Tripura				
1985-86	-	—	-	-
1990-91	75	—	-	75
1991-92	80	—	-	80
1992-93	115	—	-	115
1993-94	102	—	-	102
1994-95	97	—	-	97
1995-96	131	—	-	131
1996-97	154	—	-	154
1997-98	196	—	-	196
1998-99	306	—	-	306
1999-00	353	—	-	353
2000-01	376	—	-	376
2001-02*	416	—	-	416

$: Includes Nagaland and Arunachal Pradesh.
*Provisional

IV. 3 (CONTD.) 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	-	-	-	-
1990-91	46	-	5	41
1991-92	150	-	6	144
1992-93	507	-	6	501
1993-94	610	-	17	593
1994-95	640	-	22	618
1995-96	679	-	-	679
1996-97	799	-	22	977
1997-98	1022	-	-	1022
1998-99	1218	-	-	1218
1999-00	1363	-	16	1347
2000-01	1604	-	23	1581
2001-02*	1797	-	18	1779
TAMIL NADU				
1985-86	-	-	-	-
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
1997-98	95	-	48	47
1998-99	107	-	67	40
1999-00	138	-	51	87
2000-01	200	-	74	126
2001-02*	348	-	98	250
TOTAL ONSHORE				
1970-71	1475	36	762	647
1975-76	2368	162	1082	1124
1985-86	2954	66	1005	1883
1990-91	3916	102	1083	2731
1991-92	4251	132	1056	3063
1992-93	4708	90	955	3663
1993-94	4979	71	1040	3868
1994-95	5243	23	980	4240
1995-96	5728	17	778	4933
1996-97	5951	-	493	5458
1997-98	6618	-	698	5920
1998-99	7040	-	777	6263
1999-00	7207	-	701	6506
2000-01	7416	-	737	6679
2001-02*	7234	-	683	6551

*Provisonal

IV. 3 (Concluded) 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				
1980-81	673	—	366	307
1985-86	5180	—	2113	3064
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	16579	—	613	13098
1996-97	16794	—	819	15966
1997-98	18102	—	876	15976
1998-99	17514	—	745	17226
1999-00	17774	—	716	16769
2000-01	18465	—	760	17705
2001-02*	18426	—	878	17546
JVC/Pvt.				
1994-95	—	—	—	—
1995-96	331	—	318	13
1996-97	510	—	448	62
1997-98	1681	—	305	1376
1998-99	2874	—	190	2684
1999-00	3465	—	144	3321
2000-01	3596	—	120	3476
2001-02*	4054	—	116	3938
GRAND TOTAL				
1970-71	1445	36	762	647
1975-76	2368	162	1082	1124
1980-81	2358	67	769	1522
1985-86	8134	66	3118	4950
1990-91	17998	102	5130	12766
1991-92	18645	132	4072	14441
1992-93	18080	90	1854	16116
1993-94	18335	71	1924	16340
1994-95	19381	23	2040	17339
1995-96	22639	17	1420	21202
1996-97	23255	—	1760	21495
1997-98	26401	—	1879	24522
1998-99	27428	—	1712	25716
1999-00	28446	—	1560	26886
2000-01	29477	—	1617	27860
2001-02*	29714	—	1677	28037

*Provisional

IV. 4 STATE-WISE UTILISATION OF NATURAL GAS IN INDIA
(Financial Years)

(Mn. Cubic Metres)

Year	ONSHORE						OFFSHORE			Grand
	Gujarat	Assas**	Tripura	Andhra Pradesh	Tamil Nadu	Total	Bombay High	JVC	Total	Total (7+10)
1	2	3	4	5	6	7	8	9	10	11
1970-71	310	337	—	—	—	647	—	—	—	647
1975-76	637	487	—	—	—	1124	—	—	—	1124
1980-81	696	519	—	—	—	1215	307	—	307	1522
1985-86	801	1082	—	—	—	1883	3067	—	3067	4950
1990-91	1294	1317	70	41	9	2731	10035	—	10035	12765
1991-92	1580	1247	80	144	12	3063	11378	—	11378	14441
1992-93	1717	1311	115	501	19	3663	12453	—	12453	16116
1993-94	1909	1244	102	593	20	3868	12472	—	12472	16340
1994-95	2182	1328	97	617	16	4240	13097	—	13097	17337
1995-96	2599	1510	130	678	21	4928	15966	13	15979	20907
1996-97	2614	1722	154	799	43	5332	15975	62	16037	21369
1997-98	2757	1898	196	1022	47	5920	17226	1376	18602	24522
1998-99	2769	1930	306	1218	40	6263	16769	2684	19453	25716
1999-00	2684	2036	353	1347	87	6507	17058	3321	20379	26886
2000-01	2421	2175	376	1581	126	6679	17705	3476	21181	27860
2001-02*	2156	1950	416	1779	250	6551	17548	3938	21486	28037

*Provisional
**Includes Nagaland and Arunachal Pradesh

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

(Million Cubic Metres)

Year	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
1975-76	368	143	33	13	104	661	463	—	2	465	1126
1980-81	492	163	45	14	176	890	611	5	16	632	1522
1985-86	1299	223	78	21	795	2416	2500	10	24	2534	4950
1990-91	3634	827	89	50	1775	6375	5612	409	370	6391	12766
1991-92	4774	766	108	72	2165	7885	5509	531	516	6556	14441
1992-93	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
1997-98@	8114	3106	117	206	569	12112	8752	649	—	9401	21513
1998-99@	8714	3005	147	193	911	12970	8869	650	—	9519	22489
1999-00	8829	2329	140	250	4876	16424	8592	666	1203	10461	26886
2000-01	8801	2870	151	335	5042	17199	8480	779	1402	10661	27860
2001-02*	9214	2979	147	485	5419	18234	7957	909	937	9803	28037

@Excludes offtakes of natural gas by ONGC.
*Provisional
Neg. Negligible.

V. REFINING

V. 1 PETROLEUM REFINING CAPACITY IN INDIA AS ON 1.4.2002

(Million Tonnes Per Annum)

Refinery	Year of commissioning	Installed capacity as on 1.4.2002
(A) PUBLIC SECTOR/JVC REFINERIES		87.668
I. IOC Refineries		38.15
1 IOC, DIGBOI	1901	0.65
2 IOC, GUWAHATI	1962	1.00
3 IOC, BARAUNI	1964	4.20
4 IOC, GUJARAT	1965	13.70
5 IOC, HALDIA	1974	4.60
6 IOC, MATHURA	1982	8.00
7 IOC, PANIPAT	1998	6.00
II. HPCL REFINERIES		**13.00**
1 HPCL, MUMBAI	1954	5.50
2 HPCL, VISAKH	1957	7.50
III. BPCL, MUMBAI	**1955**	**6.90**
IV. CPCL REFINERIES		**7.00**
1 CPCL, MANALI	1969	6.50
2 CPCL, NARIMANAM	1993	0.50
V. KRL, KOCHI	**1966**	**7.50**
VI. BRPL, BONGAIGAON	**1979**	**2.35**
VII. NRL, NUMALIGARH	**1999**	**3.00**
VIII. MRPL, MANGALORE	**1996**	**9.69**
IX. ONGC, TATIPAKA	**2002**	**0.078**
(B) PRIVATE REFINERY		**27.00**
1. RPL, JAMNAGAR	1999	27.00
GRAND TOTAL (A+B)		**114.668**

Source: OCC, New Delhi.

V. 2a REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS DURING 1961 TO 2001

('000 'Tonnes)

Year	Crude Throughput			Production		
	Public Sector/ JVC	Private Sector	Total (2+3)	Public Sector/ JVC	Private Sector	Total (5+6)
1	2	3	4	5	6	7
CALENDAR YEARS						
1961	—	6440	6440	—	6090	6090
1970	10954	7465	18459	10143	7040	17172
1975	16723	5112	21835	15602	4766	20368
1980	24668	407	25075	23213	384	23597
1985	41226	—	41226	38264	—	38264
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	61704	—	61704	57869	—	57869
1997	64533	—	64533	60631	—	60631
1998	66672	—	66672	62809	—	62809
1999	73079	6459	79538	68180	4920	73100
2000	76943	24845	101788	71838	23348	95186
2001	77817	28926	106743	72595	26382	98977

V. 2b REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS DURING 1961-62 TO 2001-02

('000 'Tonnes)

Year	Crude Throughput			Production		
	Public Sector/ JVC	Private Sector	Total (2+3)	Public Sector/ JVC	Private Sector	Total (5+6)
1	2	3	4	5	6	7
FINANCIAL YEARS						
1961-62	60	6524	6584	11	6184	6195
1965-66	1966	8267	10233	1733	7828	9561
1970-71	10820	7559	18379	9965	7145	17110
1975-76	17045	5238	22283	15895	4934	20829
1980-81	25333	503	25838	23648	477	24123
1985-86	42910	—	42910	39881	—	39881
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	58741	—	58741	55081	—	55081
1996-97	62870	—	62870	59005	—	59005
1997-98	65166	—	65166	61308	—	61308
1998-99	68538	—	68538	64544	—	64544
1999-00	74052	11912	85964	69144	10267	79411
2000-01	77411	26033	103444	72059	23555	95614
2001-02	77620	29654	107274	72462	27542	100004

V. 3 REFINERY-WISE CRUDE RUN AND PRODUCTION OF PETROLEUM PRODUCTS DURING 1980-81 TO 2001-02

('000 Tonnes)

Year	IOC AOD	BPCL Mumbai	HPCL Mumbai	HPCL Visakh	IOC Guwahati	IOC Barauni	IOC Gujarat	IOC Haldia	IOC Mathura
1	2	3	4	5	6	7	8	9	10
1980-81									
Total Production	477	4629	2907	1208	577	432	6629	2056	—
Crude Run	503	4901	3113	1319	639	504	6974	2038	—
1985-86									
Total Production	511	5981	4102	2438	696	2513	7305	2579	5734
Crude Run	529	6389	4375	2659	766	2766	7830	2822	6075
1990-91									
Total Production	540	6603	5506	3231	712	2206	8791	2608	7414
Crude Run	566	6957	5766	3464	783	2416	9334	2935	7808
1991-92									
Total Production	524	6630	4496	3676	793	2060	8877	2791	7925
Crude Run	546	6940	4729	3920	856	2262	9379	3021	8231
1992-93									
Total Production	623	6875	5619	4274	749	2097	9258	2810	7430
Crude Run	547	7233	5849	4527	815	2287	9780	3040	7843
1993-94									
Total Production	535	6831	5774	4203	840	2051	8830	2878	8121
Crude Run	554	7203	6018	4448	910	2222	9434	3106	8518
1994-95									
Total Production	509	7071	4913	4759	833	2039	9148	2998	8018
Crude Run	536	7506	5234	5014	884	2220	9888	3258	8377
1995-96									
Total Production	537	7065	5674	4753	781	2129	9476	3168	7934
Crude Run	559	7460	5965	5037	839	2322	10167	3416	8332
1996-97									
Total Production	453	7279	6238	4576	778	1720	9722	3189	7744
Crude Run	477	7640	6534	4847	848	1895	10352	3451	8113
1997-98									
Total Production	479	7591	6053	2308	779	1989	10043	4445	8302
Crude Run	502	7996	6378	2467	856	2181	10694	4706	8565
1998-99									
Total Production	524	8531	4955	3637	772	2017	10346	4432	8665
Crude Run	553	8878	5203	3861	836	2204	10935	4714	8909
1999-00									
Total Production	564	8433	5702	4252	858	3177	10429	3797	7875
Crude Run	603	8907	6007	4555	914	3411	11109	4105	8125
2000-01									
Total Production	651	8203	5189	5986	653	2889	11269	3502	6863
Crude Run	678	8683	5575	6405	707	3122	12006	3873	7133
2001-02									
Total Production	640	8279	5229	6334	578	2625	11028	3601	7780
Crude Run	653	8744	5641	6706	656	2876	11697	4026	8031

Contd.

V. 3 (CONCLUDED) REFINERY-WISE CRUDE RUN AND PRODUCTION OF PETROLEUM PROPDUCTS DURING 1980-81 TO 2001-02

('000 'Tonnes)

Year	IOC Panipat	(CRL) KRL Cochin	CPCL (MRL) Manali	CPCL (MRL) N'Manam	BRPL Assam	NRL Numaligarh	MRPL Mangalore	ONGC Tatipaka	RPL Jamnagar→	Total
	11	12	13	14	15	16	17	18	19	20
1980-81										
Total Production	—	2795	2376	—	37	—	—	—	—	24123
Crude Run	—	2912	2611	—	52	—	—	—	—	25836
1985-86										
Total Production	—	2560	4723	—	739	—	—	—	—	39881
Crude Run	—	2749	5057	—	893	—	—	—	—	42910
1990-91										
Total Production	—	4715	5279	—	957	—	—	—	—	48562
Crude Run	—	5006	5698	—	1139	—	—	—	—	51772
1991-92										
Total Production	—	4554	5147	—	976	—	—	—	—	48349
Crude Run	—	4846	5529	—	1164	—	—	—	—	51423
1992-93										
Total Production	—	4853	4927	—	944	—	—	—	—	50359
Crude Run	—	5122	5323	—	1116	—	—	—	—	53482
1993-94										
Total Production	—	4568	5313	120	1020	—	—	—	—	51084
Crude Run	—	4862	5728	126	1167	—	—	—	—	54296
1994-95										
Total Production	—	4803	6461	370	1005	—	—	—	—	52927
Crude Run	—	5135	6921	382	1179	—	—	—	—	56534
1995-96										
Total Production	—	7010	5162	358	1011	—	23	—	—	55081
Crude Run	—	7421	5599	370	1215	—	39	—	—	58741
1996-97										
Total Production	—	6890	6143	332	1306	—	2635	—	—	59005
Crude Run	—	7293	6621	345	1542	—	2912	—	—	62870
1997-98										
Total Production	—	7312	6437	533	1485	—	3552	—	—	61308
Crude Run	—	7729	6965	556	1718	—	3853	—	—	65166
1998-99										
Total Production	1908	7304	5652	619	1445	—	3737	—	—	64544
Crude Run	2208	7770	6101	644	1653	—	4069	—	—	68538
1999-00										
Total Production	3688	7826	5870	612	1665	186	4713	—	10267	79411
Crude Run	4153	7830	6377	636	1905	215	5200	—	11912	85964
2000-01										
Total Production	5206	7039	5524	559	1353	1293	5879	—	23556	95614
Crude Run	5707	7520	6046	579	1488	1451	6438	—	26033	103444
2001-02										
Total Production	5323	6398	5676	549	1314	2052	5043	13	27542	100004
Crude Run	5822	6797	6123	566	1475	2307	5487	13	29654	107274

V. 4a PRODUCTION OF PETROLEUM PRODUCTS 1991 TO 2001 (CALENDER YEARS)

('000' Tonnes)

Products	Production								%Variation	
	1991	1995	1996	1997	1998	1999	2000	2001	2000/1999	2001/2000
1	2	3	4	5	6	7	8	9	10	11
A-From Crude Oil										
1. Light Distillates:	**9544**	**12258**	**12815**	**12957**	**13328**	**16186**	**24836**	**25856**	**53.4**	**4.1**
of which										
LPG @	1229	1533	1566	1661	1676	2045	3993	4530	95.3	13.4
MS	3453	4367	4597	4876	5247	5898	7849	9232	33.1	17.6
Naptha	4423	5924	6157	6015	6006	7423	9966	9267	34.3	(–)7.0
SBPS/Hexane	133	132	165	157	143	116	81	93	(–)30.2	14.8
2. Middle Distillates	**26295**	**29560**	**31661**	**33587**	**34989**	**41377**	**52534**	**54064**	**27.0**	**2.9**
of which										
Kerosene	5270	5315	5969	6357	6003	5108	8321	9514	62.9	14.3
ATF/Jet A-1/RTF	1656	2026	2165	2155	2224	2213	2509	2610	13.4	4.0
H.S.D.	17259	20348	21643	23304	24984	32012	39447	39679	23.2	0.6
L.D.O	1499	1364	1288	1237	1333	1499	1560	1578	4.1	1.2
J.B.O.	83	92	96	99	77	76	62	45	(–)18.4	(–)27.4
M.T.O.	148	169	210	197	178	247	227	207	(–)8.1	(–)8.8
3. Heavy Ends:	**12076**	**12561**	**13393**	**14087**	**14492**	**15537**	**17816**	**19057**	**14.7**	**7.0**
of which										
F.O.	4982	5512	5728	6435	6471	6704	6250	7435	(–)6.8	19.0
LSHS/HHS/RFO	4434	4092	4360	4340	4482	4734	4995	4752	5.5	(–)4.9
Total Fuel Oils	9416	9604	10088	10775	10953	11438	11245	12187	(–)1.7	8.4
Lube Oils	410	582	601	588	644	654	700	696	7.0	(–)0.6
Bitumen	1676	1922	2229	2214	2339	2459	2697	2512	9.7	(–)6.9
Pet. coke $	229	259	243	266	287	318	2054	2845	545.9	38.5
Paraffin wax	45	43	33	32	34	43	53	44	23.3	(–)17.0
Other Waxes	44	61	51	59	50	70	66	45	(–)5.7	(–)31.8
Total waxes	89	104	84	91	84	113	119	89	5.3	(–)25.2
4. Total Production	**47916**	**54379**	**57869**	**60631**	**62809**	**73100**	**95186**	**98977**	**30.2**	**4.0**
5. Crude Run	**50954**	**57971**	**61704**	**64533**	**66672**	**79538**	**101788**	**106744**	**28.0**	**4.9**
B-From Natural Gas										
6. L.P.G.	1173	1599	1811	1755	1889	1986	2040	2116	2.7	3.7

$Includes Calcined petroleum Coke.

@ Excludes LPG production from Natural Gas.

PATTERN OF PRODUCTION (PERCENTAGE)

Products	1991	1995	1996	1997	1998	1999	2000	2001
Light Distillates	18.7	21.1	20.8	20.1	20.0	20.4	24.4	24.2
Middle Distillates	51.6	51.0	51.3	52.0	52.5	52.0	51.6	50.6
Total Fuel Oils	18.5	16.6	16.3	16.7	16.4	14.4	11.0	11.4
Lubes	0.8	1.0	1.0	0.9	1.0	0.8	0.7	0.7
Bitumen	3.3	3.3	3.6	3.4	3.5	3.1	2.7	2.4
Others	1.1	0.8	0.8	0.8	0.8	1.2	3.1	3.4
Total Production	94.0	93.8	93.8	94.0	94.2	91.9	93.5	92.7
RBF & Losses/inventories	6.0	6.2	6.2	6.0	5.8	8.1	6.5	7.3
Crude Run	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

V. 4b PRODUCTION OF PETROLEUM PRODUCTS 1991-92 TO 2001-02 (FINANCIAL YEARS)

(*000 Tonnes)

Products	Production								%Variation	
	1991-92	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2000-01 1999-00	2001-02 2000-01
1	2	3	4	5	6	7	8	9	10	11
A-Crude Oil										
1. Light Distillates:	**9673**	**12433**	**12884**	**13032**	**13776**	**18314**	**25048**	**26539**	**36.8**	**6.0**
of which										
LPG @	1250	1539	1598	1666	1724	2487	4088	4778	64.4	16.9
MS	3420	4462	4704	4849	5573	6232	8070	9699	29.5	20.2
Naptha	4546	5975	6123	6103	6081	8170	9908	9180	21.3	(–)7.3
SBPS/Hexane	135	150	157	167	127	106	93	84	(–)12.3	(–)9.7
2. Middle Distillates	**26371**	**29941**	**32423**	**33933**	**36168**	**44995**	**52445**	**54409**	**16.6**	**3.7**
of which										
Kerosene	5339	5267	6236	6701	5341	5735	8714	9681	51.9	11.1
ATF/Jet A-1/RTF	1539	2127	2119	2147	2289	2292	2513	2595	9.6	3.3
H.S.D.	17404	20661	22202	23354	26716	34793	39015	39773	12.1	1.9
L.D.O	1482	1351	1286	1246	1336	1624	1481	1703	(–)8.8	15.0
J.B.O.	82	95	96	90	81	70	57	44	(–)18.6	(–)22.8
M.T.O.	143	180	204	195	194	249	214	212	(–)14.1	(–)0.9
3. Heavy Ends:	**12305**	**12707**	**13698**	**14343**	**14600**	**16102**	**18121**	**19056**	**12.5**	**5.2**
of which										
F.O.	5430	5351	5980	6771	6407	6559	6479	7488	(–)1.2	15.6
LSHS/HHS/RFO	4207	4228	4318	4309	4623	4793	4913	4739	2.5	(–)3.5
Total Fuel Oils	9637	9579	10298	11080	11030	11352	11392	12227	0.4	67.3
Lube Oils	390	633	619	593	586	728	684	651	(–)6.0	(–)4.8
Bitumen	1710	2032	2283	2158	2419	2485	2721	2561	9.5	(–)5.9
Pet. coke $	216	256	246	282	286	465	2473	2784	431.8	12.6
Paraffin wax	44	43	31	27	40	47	51	45	8.5	(–)11.8
Other Waxes	46	63	56	45	63	70	61	37	(–)12.9	(–)39.3
Total waxes	90	106	87	72	103	117	112	82	(–)4.3	(–)26.8
4. Total Production	**48349**	**55081**	**59005**	**61308**	**64544**	**79411**	**95614**	**100004**	**20.4**	**4.6**
5. Crude Run	**51432**	**58741**	**62870**	**65166**	**68538**	**85964**	**103444**	**107274**	**20.3**	**3.7**
B. Natural Gas										
6. L.P.G.	1235	1715	1780	1787	1914	1986	2045	2205	3.0	7.8

$includes Calcined Petroleum Coke. @Excludes LPG production from Natural Gas.

PATTERN OF PRODUCTION (PERCENTAGE)

Products	1991-92	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Light Distillates	18.8	21.2	20.5	20.0	20.1	21.3	24.2	24.7
Middle Distillates	51.3	51.0	51.6	52.1	52.8	52.3	50.7	50.7
Total Fuel Oils	18.7	16.3	16.4	17.0	16.1	13.2	11.0	11.4
Lubes	0.8	1.1	1.0	0.9	0.9	0.9	0.7	0.6
Bitumen	3.3	3.4	3.6	3.3	3.5	2.9	2.6	2.4
Others	1.1	0.8	0.8	0.8	0.8	1.8	3.2	3.4
Total Production	94.0	93.8	93.9	94.1	94.2	92.4	92.4	93.2
RBF & Losses/inventories	6.0	6.2	6.1	5.9	5.8	7.6	7.6	6.8
Crude Run	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

VI. SALES/CONSUMPTION

VI. 1(a) PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEAR 1992 TO 2001

(Qty. 000' Tonnes)

Product	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	%change 2001/2000
1	2	3	4	5	6	7	8	9	10	11	12
1. Light Distillates	**10288**	**10492**	**11259**	**12781**	**14034**	**15269**	**17232**	**19870**	**21627**	**22851**	**5.7**
L.P. Gas	2848	3035	3346	3741	4121	4451	4887	5640	6596	7179	8.8
Mogas	3592	3761	4037	4527	4932	5109	5430	5776	6438	6940	7.8
Naphtha	3380	3310	3258	3685	3795	4453	5973	7921	8089	8261	2.1
SBP/Hexane	157	149	141	166	212	222	174	145	128	111	(−)13.3
Others	311	237	477	686	974	1034	768	388	376	360	(−)4.3
2. Middle Distillates	**36370**	**37416**	**40280**	**43991**	**47826**	**49923**	**50905**	**54141**	**53527**	**51250**	**(−)4.3**
Kerosene	8573	8618	8931	9276	9627	9743	10460	10715	10699	10285	(−)3.9
ATF/Jet A-1	1562	1683	1870	2014	2171	2111	2101	2146	2236	2272	1.6
HSD	24396	25323	27623	30898	34278	38400	36619	39291	38310	36892	(−)3.7
LDO/MDO	1464	1343	1396	1318	1233	1212	1266	1461	1460	1234	(−)15.5
JBO/Wash Oil	70	76	83	94	94	93	81	73	70	48	(−)31.4
MTO	131	138	149	162	195	185	186	232	220	206	(−)6.4
Others	174	235	228	229	231	179	192	223	262	313	19.5
3. Heavy Ends	**12641**	**12048**	**12741**	**13497**	**14207**	**14272**	**14796**	**15962**	**15378**	**15549**	**1.1**
FO/TDO	5402	4968	5639	6361	6502	6570	6745	7084	6206	7005	12.9
LSHS/HHS	3980	4122	4086	4080	4282	4346	4390	4663	5047	4659	(−)7.7
Fuel Oils (total)	9382	9090	9725	10441	10784	10916	11135	11747	11253	11664	3.7
Lubes & Greases	888	750	657	704	690	786	848	950	801	794	(−)0.9
Bitumen/Asphalt	1831	1796	1800	1913	2206	2174	2343	2707	2781	2410	(−)13.4
Petroleum Coke	182	116	1999	254	329	227	286	324	371	409	10.2
Wax	122	119	129	135	122	87	85	152	107	105	(−)1.9
Others	236	177	231	50	76	82	99	82	65	167	156.9
Total (1+2+3)	**59299**	**59956**	**64280**	**70269**	**76067**	**79464**	**82933**	**89973**	**90262**	**89650**	**(−)0.7**
Refinery Fuel@	2793	2880	3093	3217	3433	3518	3574	4873	6855	6995	2.0
GRAND TOTAL	**62092**	**62836**	**67373**	**73486**	**79500**	**82982**	**86507**	**94846**	**97117**	**96645**	**(−)0.5**

@RBF, Lube Refinery Fuel & TPs Fuel.

Note : Total consumption figures excluding imports by Private Parties.

Note: In case of Light Distillates: others includes C3C4-REF, PBFS, NGL, CNG, Propylene, Benzene and Toulene.

In case of Middle Distillates : Others includes Heavy Cut, L.A.B.F.S. and Aromex.

In case of Heavy Ends: Others includes CBFS, HVI and LVI.

VI. 1(b) PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1994-95 TO 2001-02

('000' Tonnes)

Product	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	% change 2001-02 / 2000-01
1	2	3	4	5	6	7	8	9	10
1. Light Distillates	**11637**	**13143**	**14384**	**15742**	**17958**	**20473**	**21770**	**22916**	**5.3**
L.P. Gas	3434	3849	4184	4581	5041	6029	6613	7310	10.5
Mogas	4141	4679	4955	5182	5507	5909	6613	7011	6.0
Naphtha	3400	3669	4015	4716	6652	7970	8059	8128	0.9
SBP/Hexane	145	175	222	219	157	154	118	106	(-)10.2
Others	517	771	1008	1044	601	411	367	361	(-)1.6
2. Middle Distillates	**40976**	**45460**	**45544**	**49716**	**51686**	**54259**	**52854**	**50660**	**(-)4.2**
Kerosene	8964	9317	9646	9878	10599	10731	10714	10114	(-)5.6
ATF/Jet A-1	1903	2082	2154	2108	2112	2197	2249	2256	0.3
HSD	28261	32254	35019	36071	37217	39287	37938	36515	(-)3.8
LDO/MDO	1369	1311	1223	1235	1278	1512	1399	1202	(-)14.1
JBO/Wash Oil	87	96	92	91	77	71	67	43	(-)32.8
MTO	151	177	188	182	191	236	218	209	(-)4.8
Others	241	223	222	151	212	225	269	319	18.6
3. Heavy Ends	**12873**	**13915**	**14996**	**14380**	**15122**	**15919**	**15362**	**15516**	**1.0**
FO/TDO	5837	6496	6534	6651	6767	6816	6371	7085	11.2
LSHS/HHS	4052	4189	4313	4323	4537	4763	4989	4531	(-)9.2
Fuel Oils (total)	9889	10685	10847	10974	11304	11579	11360	11616	2.3
Lubes & Greases	668	712	705	832	885	915	797	819	2.8
Bitumen/Asphalt	1939	2005	2273	2178	2412	2879	2618	2428	(-)7.3
Petroleum Coke	197	319	276	227	315	328	414	367	(-)11.4
Wax	131	133	114	73	112	143	104	96	(-)7.7
Others	49	61	81	93	94	75	69	190	175.4
Total (1+2+3)	**65486**	**72518**	**77224**	**79838**	**84766**	**90651**	**89986**	**89092**	**(-)1.0**
Refinery Fuel@	**3137**	**3238**	**3490**	**3514**	**3700**	**5544**	**6900**	**7273**	**5.4**
Imports by pvt. parties	2027	2313	1944	4452	5796	6435	10088	11340	12.4
Grand Total	**70650**	**78069**	**82658**	**87804**	**94262**	**102630**	**106974**	**107705**	**1.3**

* Provisional

Note: In case of light distillates: Others includes C3C4-REF, PBFS, NGL, CNG, Propylexe, Benzene and Toulene.

In case of Middle distillates: Others includes Heavy Cut, L.A.B.F.S., and Aromex.

In case of Heavy ends: Others includes CBFS, HVI and LVI.

VI. 1(c) CONSUMPTION OF PETROLEUM PRODUCTS

(Product-wise details of PSUs & Pvt. Parties)

('000' Tonnes)

Products	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02*
1	2	3	4	5	6	7	8
A. PUBLIC SECTOR							
1. **Light Distillates**	**13143**	**14384**	**15742**	**17958**	**20473**	**21770**	**22916**
of which							
LPG	3849	4184	4581	5041	6029	6613	7310
Mogas	4679	4955	5182	5507	5909	6613	7011
Naphtha	3669	4015	4716	6652	7970	8059	8128
NGL	0	682	768	330	91	6	27
Others	946	548	495	428	474	479	440
2. **Middle Distillates**	**45460**	**48544**	**49716**	**51686**	**54259**	**52854**	**50661**
of which							
SKO	9317	9646	9878	10599	10731	10714	10114
ATF	2082	2154	2108	2112	2197	2249	2256
HSDO	32254	33019	36071	37217	39287	37938	36515
LDO	1311	1223	1235	1278	1512	1399	1202
Others	496	502	424	480	532	554	574
3. **Heavy Ends**	**13915**	**14296**	**14380**	**15122**	**15919**	**15362**	**15515**
of which							
Furnace Oil	6496	6534	6651	6767	6816	6371	7085
LSHS/HHS	4189	4313	4323	4537	4763	4989	4531
Lubes/Greases	712	705	835	885	915	797	819
Bitumen	2005	2273	2178	2412	2879	2618	2428
Petroleum Coke	319	276	227	315	328	414	367
Paraffin Wax	76	58	28	36	53	43	45
Other Waxes	57	57	45	76	89	62	51
Others	61	80	93	94	76	68	189
Total (A) (Excl. RBF)	**72518**	**77224**	**79838**	**84766**	**90651**	**89986**	**89092**
B. PRIVATE SECTOR							
1. **Light Distillates**	**558**	**160**	**2124**	**2573**	**4058**	**7544**	**6702**
of which							
LPG	73	83	222	311	392	403	418
Naphtha/NGL	485	15	1874	2239	2831	3614	3600
Benzene	0	0	0	23	33	8	0
Others	0	62	28	0	802	3519	2684
2. **Middle Distillates**	**622**	**507**	**1187**	**1644**	**1175**	**613**	**778**
of which							
SKO	615	507	1187	1644	1167	593	318
HSDO	7	0	0	0	8	20	31
LDO	0	0	0	0	0	0	390
Others	0	0	0	0	0	0	39
3. **Heavy Ends**	**1133**	**1277**	**1141**	**1579**	**1202**	**1931**	**3860**
of which							
Furnace Oil/LSHS	475	660	517	1206	874	1293	1366
Lubes/Greases	244	308	246	212	328	246	318
Bitumen	0	0	0	0	0	96	156
Raw Petroleum Coke	0	0	0	78	0	34	1431
CBFS	0	0	0	83	0	230	75
Others	414	309	378	0	0	32	514
Total (B)	**2313**	**1944**	**4452**	**5796**	**6435**	**10088**	**11340**
Grand Total (A+B)	**74831**	**79168**	**84290**	**90562**	**97086**	**100074**	**100432**

* Provisional

Source: Petroleum Planning & Analysis Cell.

VI. 1(d) TOTAL SALES/CONSUMPTION OF PETROLEUM PRODUCTS

(Sales to Nepal*, Sikkim, Bhutan and Bunkers/International Airlines)

(Qty. "000' Tonnes)

Year	Total Consumption	%age Growth	Year	Total Consumption	%age Growth
1	2	3	4	5	6
1950	3319	6.2	1950-51	3485	9.8
1955	4817	17.8	1955-56	4920	15.2
1960	7964	16.9	1960-61	8285	16.7
1965	12356	7.6	1965-66	12437	6.3
1970	18816	8.3	1970-71	19135	7.5
1975	23541	2.2	1975-76	23673	1.6
1980	31633	1.0	1980-81	32261	3.0
1985	42973	7.6	1985-86	43363	6.2
1990	57943	3.8	1990-91	57745	1.7
1991	58462	0.9	1991-92	59603	3.2
1992	62092	6.2	1992-93	61655	3.4
1993	62836	1.2	1993-94	63648	3.2
1994	67373	7.2	1994-95	70650	11.0
1995	73486	9.1	1995-96	78069	10.5
1996	79500	8.2	1996-97	82658	5.9
1997	82982	4.4	1997-98	87804	6.2
1998	86507	4.2	1998-99	94262	7.4
1999	94846	9.6	1999-00	102630	8.9
2000	90262	(–)4.8	2000-01	106348	3.6
2001	89650	(–)0.7	2001-02	107705	(-)1.3

Note: (i) Includes Refinery Fuel from 1960/1960-61 onwards and Exports by Pvt. Parties from 1994-95 onwards.
(ii) Prior to that Refinery Fuel consumption is not availabel
(iii) Consumption excludes imports by Private Parties for calender years.
:Excludes sales to Nepal from 1975/1975-76 onwards
Data upto 1959-60 is estimated.

VI. 2 SALES/CONSUMPTION OF PETROLEUM PRODUCTS AND MARKET SHARE OF OIL COMPANIES IN INDIA FROM 1970-71 TO 2001-02

(Qty. 000' Tonnes)

Year		I.O.C.	B. Shell/ BPCL	Esso/ HPCL	Caltex/ HPCL(VMU)	IBP Pvt.	Others Parties	Imports by Pvt. Cos.	Total
1	2	3	4	5	6	7	8	9	10
1970-71	S/C	9212	4219	2538	1279	291	373	—	17912
	%	51.4	23.6	14.2	7.1	1.6	2.1	—	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
1980-81	S/C	18494	5297	5596	—	1034	475	—	30896
	%	59.9	17.1	18.1		3.3	1.6	—	100
1985-86	S/C	23840	7580	7638		1552	262	—	40872
	%	58.3	18.6	18.7		3.8	0.6	—	100
1990-91	S/C	31426	10377	10576		2284	372	—	55035
	%	57.1	18.8	19.4		4.4	0.3	—	100
1991-92	S/C	32362	10688	11047		2498	379	—	56974
	%	56.5	19.4	19.4		4.1	0.6	—	100
1992-93	S/C	32906	11409	11511		2686	390	—	58902
	%	55.9	19.9	19.7		4.2	0.3	—	100
1993-94	S/C	33501	12099	12011		2860	341	—	60812
	%	55.1	20.3	19.4		4.6	0.6	—	100
1994-95	S/C	36359	13160	12588		2990	390	2027	67514
	%	53.9	19.5	18.6		4.4	0.6	3.0	100
1995-96	S/C	39858	14763	14151		3273	473	2313	74831
	%	53.3	19.7	18.9		4.4	0.6	3.1	100
1996-97	S/C	42054	15732	15460		3471	507	1944	79168
	%	53.1	19.9	19.5		4.4	0.6	2.5	100
1997-98	S/C	43465	16356	16000		3597	420	4452	84290
	%	51.6	19.4	19.0		4.3	0.4	5.3	100
1998-99	S/C	45489	17445	16249		3772	1810	5796	90562
	%	50.2	19.3	17.9		4.2	2.0	6.4	100
1999-00	S/C	49391	18894	17497		4133	736	6435	97086
	%	50.9	19.5	18.0		4.3	0.7	6.6	100
2000-01	S/C	47812	19368	17887		3959	960	9638	99624
	%	48.0	19.4	17.9		4.0	1.0	9.7	100
2001-02*	S/C	47151	19047	17499		3747	1648	11340	100432
	%	46.9	19.0	17.4		3.7	1.6	11.4	100.0

S/C: Sales/Consumption : *Provional @:Incldued under ESSO/HPCL from 1980-81 onwards.
Source: M-16 Report of PPAC; Note: Consumption excludes RBF

VI. 3 DELIVERIES MADE TO INTERNATIONAL/COASTAL BUNKERS DURING THE YEARS 1990-91 TO 2001-02

Items	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02*
1	2	3	4	5	6	7	8	9	10	11	12	13
SHIPPING INTERNATIONAL BUNKERS:												
F.O.	107.6	73.8	78.7	116.0	120.1	85.8	87.5	69.8	74.5	63.6	64.8	28.6
H.S.D.	10.7	12.9	14.3	13.3	11.8	18.3	13.7	11.0	9.1	6.8	3.7	3.0
L.D.O.	32.2	29.4	27.7	29.1	25.0	20.4	19.7	17.3	15.8	15.7	18.7	6.3
TOTAL	**150.5**	**116.1**	**120.7**	**158.4**	**156.9**	**124.5**	**120.9**	**98.1**	**99.4**	**86.1**	**87.2**	**37.9**
COASTAL BUNKERS:												
F.O.	208.0	194.3	182.9	195.4	214.4	160.7	194.3	174.3	144.3	153.4	139.9	170.5
H.S.D.	129.5	122.3	111.2	120.6	129.5	120.5	157.6	137.7	115.7	156.1	153.4	217.7
L.D.O.	34.2	34.7	39.8	40.1	38.1	32.1	29.6	26.5	26.5	26.8	21.8	25.2
TOTAL	**371.7**	**351.3**	**333.9**	**356.1**	**382.0**	**313.3**	**381.5**	**338.5**	**286.5**	**336.3**	**315.1**	**413.4**
TOTAL BUNKERS:												
F.O.	315.6	268.1	261.6	311.4	334.5	246.5	281.8	244.1	218.9	217.0	204.7	199.1
H.S.D.	140.2	135.2	125.5	133.9	141.3	138.8	171.3	148.7	124.9	162.9	157.1	220.7
L.D.O.	66.4	64.1	67.5	69.2	63.1	52.5	49.3	43.8	42.3	42.5	40.5	31.5
TOTAL	**522.2**	**467.4**	**454.6**	**514.5**	**538.9**	**437.8**	**502.4**	**463.6**	**386.1**	**422.4**	**402.3**	**451.3**

Source: M6 Report of OCC/Petroleum Planning and Analysis Cell.

*: Provisional

VI. 4 STATE-WISE CONSUMPTION OF MAJOR PETROLEUM PRODUCTS DURING 2001-02* (DETAILS RELATE TO PSUs ONLY)

('000' Tonnes)

State/UT	Naphtha	LPG	Petrol	SKO	ATF	Diesel	LDO	FO	LSHS/ HHS	Lubes & Greases	Others	Total
A. States												
1. Andhra Pradesh	310	590	527	596	47	3292	59	405	117	49	333	6325
2. Arunachal Pradesh	0	8	11	12	1	46	0	0	0	1	5	84
3. Assam	25	126	76	280	63	398	5	47	34	6	178	1236
4. Bihar	0	170	105	677	5	1118	17	70	0	13	132	2307
5. Chhattisgarh	0	61	78	128	0	419	5	169	9	11	35	915
6. Delhi	0	474	570	200	591	1048	61	4	3	43	92	3086
7. Goa	244	34	47	24	28	233	4	176	0	4	6	800
8. Gujarat	2165	445	574	803	58	2362	172	622	1148	37	533	8919
9. Harayana	0	265	237	168	29	2173	64	191	380	21	198	3726
10. Himachal Pradesh	0	61	49	49	5	282	3	29	14	5	34	531
11. Jammu & Kashmir	0	76	72	152	34	272	6	4	4	7	33	660
12. Jharkhand	0	53	89	198	3	516	49	133	6	22	38	1107
13. Karantaka	371	415	482	525	91	2167	34	525	154	33	34	4858
14. Kerala	391	312	353	269	76	1229	5	366	216	29	176	3422
15. Madhya Pradesh	147	282	256	529	30	1528	48	418	13	36	185	3472
16. Maharashtra	1057	1095	1019	1444	667	3909	257	1263	939	189	583	12422
17. Manipur	0	14	9	16	1	21	0	1	0	0	4	66
18. Meghalaya	0	9	17	21	0	108	0	0	0	1	11	167
19. Mizoram	0	14	9	7	0	20	1	0	0	0	6	57
20. Nagaland	0	8	10	14	1	19	0	0	0	0	6	58
21. Orissa	24	84	120	317	31	731	16	228	1	17	65	1634
22. Punjab	34	374	448	308	54	2101	25	263	633	30	205	4475
23. Pondicharry	0	20	27	14	0	146	2	31	3	3	8	254
24. Rajasthan	716	305	288	435	49	2584	43	298	39	27	194	4978
25. Sikkim	0	4	3	9	0	15	1	2	0	0	6	40
26. Tamil Nadu	671	716	634	637	200	3135	49	1052	604	103	342	8143
27. Tripura	0	14	9	31	2	42	0	1	0	0	10	109
28. Uttranchal	0	95	60	110	0	320	16	23	38	5	14	681
29. Uttar Pradesh	1121	763	567	1306	62	4073	132	381	171	51	287	8914
30. West Bengal	852	384	197	803	94	1952	114	312	0	60	332	5100
Total (A)	**8128**	**7271**	**6943**	**10082**	**2222**	**36259**	**1188**	**7039**	**4526**	**803**	**4085**	**88546**
B.Union Territories												
1. Andman & Nicobar	0	1	4	5	5	50	0	0	0	1	2	68
2. Chandigarh	0	30	47	14	29	61	2	7	5	2	6	203
3. Dadra & Nagar Haveli	0	2	6	3	0	84	9	30	0	11	3	148
4. Daman & Diu	0	3	5	3	0	24	3	6	0	1	7	52
5. Lakshweep	0	Neg.	0	Neg.	0	3	0	0	0	Neg.	1	4
Total (B)	**0**	**36**	**62**	**25**	**34**	**222**	**14**	**43**	**5**	**15**	**19**	**475**
C.Outside Territories												
1. Bhutan	0	3	6	7	0	34	Neg.	2	0	1	9	62
2. Nepal	0	0	0	0	0	0	1	0	0	0	8	9
Total (C)	**0**	**3**	**6**	**7**	**0**	**34**	**0**	**3**	**0**	**1**	**17**	**71**
Grand Total (A+B+C)	**8128**	**7310**	**7011**	**10114**	**2256**	**36515**	**1202**	**7085**	**4531**	**819**	**4121**	**89092**

Source: Petroleum Planning and Analysis Cell, New Delhi.

Note: Product-wise consumption excludes imports by Private Parties. That is why it varies from the total consumption of individual Products.

* Provisional

VI. 5 STATE-WISE PER CAPITA SALES/CONSUMPTION OF PETROLEUM PRODUCTS

(Unit: Kg)

Territory	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	2000-012001-02(P)	
A. STATES											
Andhra Pradesh	52.1	56.4	59.1	63.3	67.6	71.6	73.9	78.7	86.9	82.9	83.5
Arunachal Pradesh	83.9	86.0	98.3	100.0	100.0	102.1	77.1	79.6	92.4	78.8	77.0
Assam	44.3	41.6	40.4	42.0	41.6	41.9	38.4	39.9	43.8	44.0	46.4
Bihar	43.0	35.4	33.6	37.2	36.2	35.6	35.0	36.9	37.9	39.7	27.8
Chhattisgarh											44.0
Delhi	241.3	243.4	258.6	286.4	277.8	289.9	263.6	243.8	267.2	235.5	223.9
Goa	563.2	561.5	269.2	589.8	589.8	580.3	532.9	443.7	582.1	612.4	595.2
Gujarat	147.3	145.3	145.1	162.1	172.5	187.2	186.8	202.2	215.9	190.0	176.3
Harayana	110.9	112.8	122.8	132.1	136.1	147.9	140.2	149.1	173.6	172.0	176.7
Himachal Pradesh	40.7	43.1	46.6	48.5	52.9	64.5	60.5	65.4	78.1	86.7	87.4
Jammu & Kashmir	45.2	46.8	52.2	56.9	53.3	56.6	56.7	57.8	64.2	61.2	65.5
Jharkhand										13.1	41.1
Karnataka	57.6	60.0	64.2	70.7	75.3	83.5	79.3	79.4	85.7	84.3	92.1
Kerala	68.0	68.7	75.6	83.1	85.2	91.0	94.3	98.7	113.3	119.8	107.4
Madhya Pradesh	38.6	40.2	41.9	46.8	48.8	51.6	51.9	51.3	57.6	68.1	57.4
Maharashtra	118.4	124.1	129.0	129.9	131.4	139.0	138.2	134.4	139.2	129.3	128.4
Manipur	36.5	38.6	36.5	44.4	41.4	40.9	32.6	31.0	36.7	32.6	27.6
Meghalaya	61.3	66.5	66.5	70.0	70.4	79.1	68.0	71.4	79.0	69.0	72.4
Mizoram	40.8	44.9	56.5	54.2	46.8	59.5	55.2	50.0	59.5	62.9	64.0
Nagaland	40.3	44.7	43.0	45.8	43.9	46.0	39.2	44.0	39.9	29.2	29.2
Orissa	38.6	39.2	40.3	43.7	45.3	47.3	46.4	46.1	45.3	45.2	44.5
Pondicherry										263.9	260.8
Punjab	145.9	150.5	157.3	168.3	176.3	184.8	185.4	189.8	195.7	173.0	184.2
Rajasthan	55.4	59.0	64.4	70.9	74.9	81.6	78.6	82.1	89.5	85.1	88.1
Sikkim	39.4	49.3	49.3	52.5	61.7	70.2	66.7	64.2	73.5	72.2	74.0
Tamil Nadu	90.2	91.6	93.3	100.7	107.8	111.4	112.1	123.0	135.2	135.0	131.1
Tripura	22.6	25.8	24.7	26.4	25.9	29.2	26.4	27.4	30.3	33.2	34.2
Uttar Pradesh	42.9	44.9	46.6	51.9	49.7	55.6	56.4	58.8	61.6	60.2	53.7
Uttranchal										20.9	80.3
West Bengal	50.1	49.5	49.1	50.9	50.2	52.2	49.6	51.0	58.4	58.5	63.6
B. OTHER AREAS											
Chandigarh	288.6	272.6	325.5	325.0	251.3	261.5	260.5	276.2	362.8	275.2	225.3
Goa. (Incl. Daman & Diu											
Dadra & Nagar Haveli)	146.4*	166.7*	183.3*	285.0	277.8	451.9	603.3	625.8	827.6	536.3	528.4
Others	158.2	178.9	190.4	180.0	188.2	200.0	195.1	202.7	242.0	223.1	172.7
TOTAL ALL INDIA@	**70.5**	**72.9**	**75.2**	**81.1**	**79.2**	**86.2**	**90.1**	**92.2**	**102.0**	**103.7**	**97.8**

PER CAPITA CONSUMPTION OF SELECTED PETROLEUM PRODUCTS FROM 1991-92 TO 2001-02

(Unit: Kg)

Product	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	2000-012001-02(P)	
NAPHTHA	4.1	4.0	3.8	4.0	4.0	4.4	4.9	6.4	8.1	7.8	7.9
M.S.	4.2	4.2	4.5	4.9	5.1	5.2	5.4	5.7	6.0	6.4	6.8
SKO	9.9	10.0	10.3	10.6	10.2	9.6	10.3	10.9	10.9	10.4	9.8
HSDO	26.9	28.7	30.6	33.4	33.2	36.0	37.8	38.0	40.0	36.9	35.6
LDO	1.7	1.7	1.6	1.6	1.4	1.3	1.3	1.3	1.5	1.4	1.2
F.O. (Regular)	5.8	6.2	5.9	6.9	7.1	7.1	7.0	6.7	6.9	6.2	6.9
LSHS/HHS	5.0	4.7	4.9	4.8	4.6	4.7	4.5	4.7	4.9	4.9	4.4
TOTAL ALL INDIA@ SALES/CONSUMPTION	**70.6**	**72.9**	**75.2**	**81.1**	**79.2**	**86.2**	**90.1**	**92.2**	**102.0**	**103.7**	**97.8**

Note: Population taken from CSO publications.

@ : All India actual consumption of all products including Ref. Fuel & International Bunkers upto the year 1995-96. Later on total consumption Includes imports from Pvt. Parties and Excluding RBF

(P) : Provisional

* : Figures including Goa, Goa has been shown separately later on.

VI. 6 SECTOR-WISE CONSUMPTION (END-USE) OF SELECTED PETROLEUM PRODUCTS

(Qty. '000 Tonnes)

Sector	1998-99		1999-00		2000-01		2001-02*	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total
1	2	3	4	5	6	7	8	9
			LPG					
1. Domestic	4148	82.3	4974	82.5	5432	82.1	6067	83.0
2. Commercial/Industry	817	16.2	956	15.9	1021	15.5	1064	14.6
3. Others	76	1.5	99	1.6	160	2.4	179	2.4
Total (1+2+3)	**5041**	**100.0**	**6029**	**100.0**	**6613**	**100.0**	**7310**	**100.0**
			NAPHTHA					
1. Fertilizers	3648	54.8	3582	44.9	3618	44.9	34.26	42.2
2. Petrochemicals	1332	20.0	1923	24.2	1989	24.7	2527	31.1
3. Others	1672	25.1	2465	30.9	2452	30.4	2175	26.7
Total (1+2+3)	**6652**	**100.0**	**7970**	**100.0**	**8059**	**100.0**	**8128**	**100.0**
			HSDO					
1. TRANSPORT								
(i) Road Transport	19710	53.0	20711	52.7	20471	54.0	19736	54.0
(ii) Aviation	19	0.1	33	0.1	40	0.1	36	0.1
(iii) Shipping	219	0.6	262	0.7	247	0.7	285	0.8
(iv) Railways	1419	3.8	1380	3.5	1439	3.8	1586	4.3
Sub total (1)	**21367**	**57.4**	**22386**	**57.0**	**22197**	**58.5**	**21643**	**59.3**
2. PLANATATION/FOOD								
(i) Sugar Mills	116	0.3	129	0.3	136	0.4	122	0.4
(ii) Others (incl. Plan. of Food)	7034	18.9	7464	19.0	7361	19.4	7098	19.4
Sub total (2)	**7150**	**19.2**	**7593**	**19.3**	**7497**	**19.8**	**7220**	**19.8**
3. POWER GENERATION (utilities)	**2576**	**6.9**	**2622**	**6.7**	**2596**	**6.8**	**2506**	**6.9**
4. INDUSTRY								
(i) Iron & Steel	124	0.3	128	0.3	102	0.3	87	0.2
(ii) Textile & Fibre	686	1.8	596	1.5	416	1.1	266	0.7
(iii) Cement	233	0.6	205	0.5	132	0.3	110	0.3
(iv) Ceremic & Glass	67	0.2	74	0.2	59	0.2	46	0.1
(v) Chemicals & Allied	371	1.0	424	1.1	165	0.4	108	0.3
(vi) Aluminium	11	0.0	14	0.0	13	0.0	11	0.0
(vii) Mining & Quarrying	633	1.7	635	1.6	642	1.7	629	1.7
(viii) Engg. (Mech.& Elec.)	285	0.8	290	0.7	229	0.6	184	0.5
(ix) Fertilizers	35	0.1	34	0.1	31	0.1	48	0.1
(x) Other Industries & Construction	1409	3.8	1490	3.8	1343	3.5	1228	3.4
Sub total (4)	**3854**	**10.4**	**3890**	**9.9**	**3132**	**8.3**	**2717**	**7.4**
5. Misc. Services (incl. DGS&D)	**2270**	**6.1**	**2796**	**7.1**	**2516**	**6.6**	**2429**	**6.6**
Total (1+2+3+4+5)	**37217**	**100.0**	**39287**	**100.0**	**37938**	**100.0**	**36515**	**100.0**

*Provisional

Source: Petroleum Planning and Analysis Cell.

VI. 6 (Contd.) SECTOR-WISE CONSUMPTION (END-USE) SELECTED PETROLEUM PRODUCTS

(Qty. 'OOO' Tonnes)

Sector	1998-99		1999-00		2000-01		2001-02*	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total
1	2	3	4	5	6	7	8	9
			LDO					
1. TRANSPORT								
i) Road Transport	2	0.2	3	0.2	3	0.2	1	0.1
ii) Aviation	1	0.1	4	0.3	4	0.3	10	0.8
iii) Shipping	45	3.5	43	2.8	42	3.0	29	0.8
iv) Railways	2	0.2	2	0.1	3	0.2	4	0.3
v) Other Transport (incl. Agri. Retail Trade)	13	1.0	7	0.5	6	0.4	9	0.7
Sub Total (1)	**63**	**4.9**	**5.9**	**3.9**	**58**	**4.1**	**53**	**4.4**
2. PALTATION/FOOD								
i) Sugar Mills	2	0.2	3	0.2	2	0.1	4	0.3
ii) Others (incl. Plan. of Food)	39	3.1	44	2.9	44	3.1	47	3.9
Sub Total (2)	**41**	**3.2**	**47**	**3.1**	**46**	**3.3**	**51**	**4.2**
3. Power Generation (Utilities)	**170**	**13.3**	**176**	**11.6**	**215**	**15.4**	**165**	**13.7**
4. Industry								
i) Iron & Steel	78	6.1	83	5.5	82	5.9	77	6.4
ii) Textile & Fibre	63	4.9	107	7.1	94	6.7	104	8.6
iii) Cement	19	1.5	40	2.6	36	2.6	31	2.6
iv) Ceremic & Glass	32	2.5	46	3.0	37	2.6	35	2.9
v) Chemicals & Allied	159	12.4	165	10.9	142	10.2	122	10.1
vi) Aluminium	3	0.2	5	0.3	5	0.4	8	0.7
vii) Mining & Quarrying	15	1.2	17	1.1	18	1.3	18	1.5
viii) Engg. (Mech. & Elec)	97	7.6	96	6.3	80	5.7	76	6.3
ix) Fertilizers	4	0.3	9	0.6	17	1.2	1	0.1
x) Others Industries & Construction)	176	13.8	201	13.3	170	12.2	149	12.4
Sub Total (4)	**646**	**50.5**	**769**	**50.9**	**681**	**48.7**	**621**	**51.7**
5. Misc. Services	**358**	**28.0**	**461**	**30.5**	**399**	**28.5**	**312**	**25.9**
Total (1+2+3+4+5)	**1278**	**100.0**	**1512**	**100.0**	**1399**	**100.0**	**1202**	**100.0**
			Financial Oil					
1. TRANSPORT								
i) Road Transport	8	0.1	6	0.1	5	0.1	5	0.1
ii) Aviation	2	0.0	22	0.3	26	0.4	58	0.8
iii) Shipping	251	3.7	209	3.1	200	3.1	179	2.5
iv) Railways	11	0.2	11	0.2	12	0.2	11	0.2
v) Other Railways (incl. Agri. Retail Trade)	77	1.1	103	1.5	75	1.2	55	0.8
Sub Total (1)	**349**	**5.2**	**351**	**5.1**	**318**	**5.0**	**308**	**4.3**
2. PLANTATION/FOOD								
i) Sugar Mills	16	0.2	13	0.2	9	0.1	8	0.1
ii) Others (incl. plan. of Foo)	303	4.5	273	4.0	267	4.2	314	4.4
Sub Total (2)	**319**	**4.7**	**286**	**4.2**	**276**	**4.3**	**322**	**4.5**

*Figures relate to PSUs only.

VI. 6 (Concl.) SECTOR-WISE CONSUMPTION @ (END-USE) OF SELECTED PETROLEUM PRODUCTS

(Qty. 'OOO' Tonnes)

Sector	1998-99		1999-00		2000-01		2001-02*	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total
1	2	3	4	5	6	7	8	9
3. Power Generation (Utilities)	571	8.4	515	7.6	481	7.5	551	7.8
4. Industry								
i) Iron & Steel	450	6.6	392	5.8	399	6.3	416	5.9
ii) Textile & Fibre	457	8.2	608	8.9	554	8.7	685	9.7
iii) Cement	402	5.9	476	7.0	404	6.3	446	6.3
iv) Ceremic & Glass	131	1.9	115	1.7	133	2.1	138	1.9
v) Chemicals & Allied	1016	15.0	1060	15.6	959	15.1	1274	18.0
vi) Aluminium	140	2.1	137	2.0	137	2.2	127	1.8
vii) Mining & Quarrying	95	1.4	108	1.6	133	2.1	146	2.1
viii) Engg. (Mech. & Elec.)	179	2.6	191	2.8	175	2.7	188	2.7
ix) Fertilizers	942	13.9	965	14.2	897	14.1	820	11.6
x) Other Industries & Construction	912	13.5	849	12.5	752	11.8	817	11.5
Sub Total (4)	**4824**	**71.3**	**4901**	**71.9**	**4543**	**71.3**	**5057**	**71.4**
5. Misc. Services	704	10.4	763	11.2	753	11.8	847	11.9
Total (1+2+3+4)	**6767**	**100.0**	**6816**	**100.0**	**6371**	**100.0**	**7085**	100.0
			LSHS/HHS					
1. TRANSPORT	5	0.1	7	0.1	1	0.0	0	0.0
2. PLANTATION/FOOD								
i) Sugar Mills	0	0.0	0	0.0	0	0.0	0	0.0
ii) Others (incl. Plan. of Food)	43	0.9	27	0.6	22	0.4	21	0.4
Sub Total (2)	**43**	**0.9**	**27**	**0.6**	**22**	**0.4**	**21**	**0.4**
3. Power Generation (Utilities)	1297	28.6	1363	28.6	1657	33.2	1403	31.0
4. Industry								
i) Iron & Steel	41	0.9	54	1.1	102	2.0	83	1.8
ii) Textiles & Fibre	170	3.7	175	3.7	177	3.5	164	3.6
iii) Cement	45	1.0	80	1.7	63	1.3	67	1.5
iv) Ceremic & Glass	68	1.5	76	1.6	96	1.9	95	1.2
v) Chemicals & Allied	353	7.8	284	6.0	260	5.2	328	7.2
vi) Aluminium	Neg	0.0	4	0.1	6	0.1	6	0.1
vii) Mining & Quarrying	22	0.5	8	0.2	5	0.1	1	0.0
viii) Engg. (Mech. & Elec.)	92	2.0	254	5.3	273	5.5	251	5.5
ix) Fertilizers	1910	42.1	1767	37.1	1723	34.5	1489	32.9
x) Other Industries & Construction	279	6.1	334	7.0	243	4.9	251	5.5
Sub Total (4)	**2980**	**65.7**	**3036**	**63.7**	**2948**	**59.1**	**2735**	**60.4**
5. Misc. Services	**212**	**4.7**	**330**	**6.9**	**361**	**7.2**	**372**	**8.2**
Total (1+2+3+4+5)	**4537**	**100.0**	**4763**	**100.0**	**4989**	**100.0**	**4531**	**100.0**

* = Provisional

@ Figures relate to PSUs only.

VI. 7 CONSUMPTION OF DIESEL OIL IN INDIAN RAILWAYS DURING 1960-61 TO 2001-02

Year	No. of Diesel Locomotives	Consumption of Diesel Oil(in Kls)	Consumption of Diesel per Locomotive (in Kls)
1	2	3	4
1960-61	181	62771	346.8
1965-66	727	310813	427.5
1970-71	1169	569025	846.8
1975-76	1803	797610	442.2
1980-81	2403	1067470	442.2
1985-86	3046	1440269	472.8
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	4363	1859443	426.5
1997-98	4496	1874139	416.8
1998-99	4586	1900804	414.5
1999-00	4651	1983427	426.4
2001-01	4702	1999262	425.2
2001-02*	4815	1970723	409.3

* = Provisional

Source : Railway Board, New Delhi.

VI. 8 INDUSTRY/PLANT-WISE OFFTAKE OF NAPHTHA DURING THE YEARS 1994-95 TO 2001-02

(Qty. "000' Mts)

Category and Plant		1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02*
	1	2	3	4	5	6	7	8	9
I.	**Fertilizer Plant**								
	Madras Fertilizers	185	223	193	98	216	228	212	176
	HFC, Durgapur	0	74	46	6	0	0	0	0
	FCI, Gorakhpur	0	0	0	0	0	0	0	0
	HCF, Barauni	75	57	47	51	22	0	0	0
	SFC Kota	169	183	182	181	190	183	155	160
	Duncans Ind. Ltd.	356	392	336	358	382	352	315	297
	RFP, Rourkela	105	124	126	113	114	65	48	18
	GSFC, Baroda	92	75	81	65	114	59	62	104
	FACT, Cochin	147	138	143	148	169	174	136	199
	ZAC, Goa	253	288	253	281	205	243	213	216
	IFFCO, Phulpur	298	262	269	432	657	628	667	656
	IFFCO, Kalol	60	57	45	78	106	116	66	46
	MCFL, Mangalore	124	122	168	140	165	127	152	186
	SPIC, Tuticorin	302	290	266	275	265	308	304	270
	GNFC, Bharuch	1	Neg.	2	Neg.	Neg.	0	0	0
	FACT, Alwaye	41	33	26	36	80	10	219	9
	Coromandal, Ferts, Viza	64	78	84	76	60	3	0	0
	NFL, Nangal	46	50	49	53	47	13	0	35
	Others	386	478	703	1013	1090	1382	1300	1471
	Sub Total (Fertilizers)	**2704**	**2924**	**3019**	**3404**	**3882**	**3891**	**3849**	**3843**
II.	**Petrochemicals Plants:**								
	BRPL, Bongaigaon	-	26	5	0	0	0	0	0
	HOC, Rasayani	5	8	8	8	6	8	3	5
	IPCL, Baroda	413	477	442	455	412	512	545	515
	NOCIL, Bombay	183	140	281	260	221	186	262	190
	RCF, (Mathanol) Bomba	0	-	-	-	-	-	0	0
	Rama Ptro Chemicals	25	33	58	43	23	6	0	0
	Reliance Ind. Ltd.	163	222	359	364	516	486	367	500
	National Peroxide	3	4	4	4	4	4	5	4
	Oswal Agro	14	8	53	65	7	0	0	0
	RCF, Thal	-	-	-	-	-	0	0	0
	Others	38	65	62	146	273	130	472	896
	Sub Total (Petro-Chem	**844**	**983**	**1272**	**1345**	**1462**	**1332**	**1654**	**2110**
III.	**Others**								
	Essar Power Ltd.	-	-	-	-	-	232	39	66
	Essar Steel Ltd.	-	-	-	-	-	279	126	12
	Dabhol Power Corp.	-	-	-	-	-	0	77	47
	L&T Rajoula	-	-	-	-	-	52	62	69
	IPCL, Dahes	-	-	-	-	-	186	279	256
	NTPC, Kayamkulam	-	-	-	-	-	313	343	
	A.P. Gaspower Corpn.	-	-	-	-	-	193	90	7
	NTPC, Kawas	-	-	-	-	-	127	370	410
	Gujarat Ind. Power Corp.	-	-	-	-	-	146	68	3
	NTPC, Auriya	0	0	0	0	0	95	133	110
	Gujarat Alkali	0	0	0	0	0	51	57	40
	HCL, Khetri	2	4	5	Neg.	2	2	1	1
	Others	79	221	400	760	1523	948	886	799
	Sub Total (Others)	**81**	**225**	**405**	**760**	**1525**	**2624**	**2531**	**2050**
	Grand Total (1+II+III)	**3629**	**4132**	**4696**	**5509**	**6869**	**7846**	**8034**	**8003**

*Provisional, Source: Sales Performance Review, March, 2002.

VI. 9 PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS FROM 1994-95 TO 2001-02

(Qty. '000' Mts)

Category and Plant	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9
			(I) POWER					
A. Northern:								
NTPC Unchahar	—	—	—	—	—	—	9.5	2.7
TPS Obra	34.2	22.9	19.4	11.1	21.3	21.0	21.2	20.1
HSEB Hardwaganj	13.8	3.6	4.5	4.5	8.5	7.6	2.7	2.5
BTPS Bhadrapur	0.0	0.0	0.0	1.4	0.0	1.2	0.3	0.0
GNTP Bhatinda	2.5	7.6	0.0	2.9	13.8	2.7	2.6	3.0
TPS Panicha7.3	11.2	6.8	5.9	11.4	10.3	3.1	5.4	
TPS Singraull	10.9	2.9	5.4	1.5	1.4	na	5.6	2.7
TPS Rihand	7.1	12.3	1.5	1.4	1.4	na	1.4	0.0
KTPS Kota	18.0	18.4	5.5	14.3	7.9	1.4	1.3	0.0
DVB Delhi	24.5	29.3	25.6	21.2	11.4	7.0	6.8	3.0
HSEb Faridabad	5.3	5.7	6.1	0.0	0.0	0.0	0.0	0.0
TPS Ropar	28.2	24.7	23.1	19.4	14.5	14.3	10.6	10.0
TPS Panipat	33.7	48.3	40.3	46.5	33.3	13.7	8.2	17.3
HWP Rawatbhatta	46.8	49.3	28.5	30.9	24.5	1.4	0.0	0.0
Sub Total (A)	**232.2**	**236.2**	**166.7**	**161.0**	**149.4**	**116.5**	**71.8**	**66.7**
B. Eastern:								
NTPC Kahalgaon	—	—	—	—	—	4.6	4.3	1.4
ASEB Chandrapura	55.4	65.1	43.0	42.6	30.8	11.2	0.0	0.0
CTPS Chandrapura	9.7	32.4	42.7	21.8	21.3	34.2	35.3	29.8
NTPC furrukka	34.3	24.4	23.7	28.2	33.0	19.0	14.1	9.9
BTPS Barauni	17.8	16.4	17.1	7.1	6.3	10.3	5.7	4.3
TTPS Talchar	10.7	15.4	8.9	0.0	3.1	1.4	0.0	0.0
BTPS Salakati	3.8	9.0	8.7	10.7	4.9	3.7	4.2	2.7
Sub Total (B)	**131.7**	**162.7**	**144.1**	**110.4**	**99.4**	**113.0**	**114.7**	**111.6**
C. Western:								
GEB Dhuwaran	637.4	745.8	724.9	686.4	507.5	611.1	643.4	473.5
GEB Ukai	48.6	63.9	70.4	46.2	18.4	20.3	10.5	6.9
GEB Gandhinagar	8.9	24.2	31.8	38.2	39.2	39.6	22.0	10.1
AECO Sabarmati	11.1	9.2	10.8	13.7	9.7	5.9	4.2	5.9
GEB Wanakbari	61.3	68.2	158.1	12.6	9.9	8.7	7.3	5.8
MPEB Sarani	64.6	48.0	30.0	18.4	16.3	8.4	16.0	24.0
MSEB Koradi	19.9	13.6	18.5	12.2	20.3	15.4	18.2	13.8
MSEB Chanderpur	39.9	23.6	16.1	30.7	27.0	6.6	13.8	20.2
MPEB Dhari	13.7	12.2	8.2	7.1	5.7	4.0	0.0	0.0
MSEB Nasik	22.0	18.6	31.3	7.4	11.3	7.3	7.5	16.8
MSEB Bhuswal	6.6	12.1	3.8	5.6	8.2	4.8	4.8	8.3
MSEB Paras	1.6	0.5	1.5	0.9	0.0	0.0	0.2	0.8
MSEB Parli	16.8	23.2	33.5	25.6	15.4	15.1	9.8	11.2
NTPC Korba	9.7	7.3	6.3	2.8	4.6	5.6	4.2	1.4
MPEB Korba	22.4	14.8	13.4	10.3	8.1	9.3	7.1	18.4
TATA Thermal	629.1	683.2	594.0	663.3	554.0	448.6	813.9	823.9
MPE Chachai	18.8	17.7	5.8	4.4	4.7	3.5	5.9	11.6
NTPC Waldhan	10.1	7.0	2.8	3.0	4.4	13.0	23.9	4.2
MSEB Kaperrkada	3.0	5.4	2.8	5.7	4.1	2.6	15.3	19.5
Sub Total (C)	**1645.5**	**1798.5**	**1764.0**	**1594.5**	**1268.8**	**1244.7**	**1645.2**	**1489.8**
D. Southern:								
GMR vasavi	—	—	—	—	—	248.6	230.8	232.8
TTRS Tuticorin	7.2	4.3	3.5	7.8	5.5	5.9	8.3	4.6
KTPS Palvancha	11.1	13.7	14.6	18.0	24.6	13.1	12.8	9.1
RTPS Raichur	6.3	9.4	2.4	2.3	12.2	17.3	10.5	6.8
MTPP Metturdam	1.3	9.7	0.0	5.3	35.3	24.1	4.0	0.8
NTPC Ramagundam	5.1	4.0	0.0	0.0	1.4	0.0	0.0	0.0
ETPS Ennore	3.6	6.8	2.6	0.0	0.0	0.0	0.0	0.0
NLC Neyveli TML	27.1	47.5	41.5	21.1	16.0	20.3	79.7	58.8
HWP Manuguru	25.7	17.8	16.3	10.3	7.8	3.1	4.7	2.9
KEB Yellahanka	—	—	100.0	123.5	117.9	129.0	128.1	151.0
VTPS Ibrahimpatan	—	—	3.6	5.6	4.1	2.7	4.5	2.6
RTPS Kalkamalla	—	—	9.6	4.9	2.3	2.5	3.6	0.0
NMTP Chennai	—	—	—	—	—	69.2	59.1	34.0
Others	87.0	119.5	—	—	—	131.0	156.5	414.1
Sub Total (D)	**174.4**	**232.7**	**194.1**	**198.8**	**227.1**	**666.8**	**702.6**	**917.5**
Total Power (A+B+C)	**2183.9**	**2430.1**	**2268.9**	**2064.7**	**1744.7**	**2141.0**	**2534.0**	**2586.0**

contd. ....

VI. 9 PLANT/CUSTOMER-WISE OFF TAKE OF FO/LSHS FROM 1994-95 TO 2001-02

(Qty. '000' Mts)

Category and Plant	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02*
1	2	3	4	5	6	7	8	9
			(II) Fertilizer Plants:					
A. Northern:								
IFFCO Anola	—	—	—	—	—	1.5	4.3	0.0
Indo Gulf Jagdishpur	52.8	49.7	56.2	64.3	49.9	37.9	11.3	0.0
NFL Nangal	265.8	332.9	282.3	303.1	297.1	280.0	210.7	291.2
NFL Bhatinda	282.7	356.3	267.6	330.2	306.1	334.0	237.7	310.3
NFL Panipat	259.2	334.2	294.3	335.9	296.4	304.8	290.7	288.5
IFFCO Phulpur	22.8	25.5	18.3	48.5	107.4	103.9	62.2	69.0
SFC Kota	8.1	10.6	6.9	1.4	0.0	0.0	0.0	0.0
Sub Total (A)	**891.4**	**1109.2**	**925.6**	**1083.4**	**1056.9**	**1062.1**	**816.9**	**959.0**
B. Eastern:								
Oswal Fertilizers	na	na	na	na	na	0.0	18.2	17.6
HFC Durgapur	4.6	9.6	19.1	2.7	0.0	0.0	0.0	0.0
FCI Sindri	209.8	212.8	188.6	173.2	183.5	200.8	179.8	58.6
FCI Barauni	24.9	19.4	15.9	11.5	6.0	0.0	0.0	0.0
FCI Talchar	6.5	7.3	8.3	10.4	8.1	1.5	0.0	0.0
Paradeep Phosphate	na	na	na	na	na	27.0	6.2	3.1
Sub Total (B)	**245.8**	**249.1**	**231.9**	**197.8**	**197.6**	**229.3**	**204.2**	**79.3**
C. Western:								
RCF Mumbai	—	—	—	—	—	45.6	11.6	0.0
ZAC Goa	98.7	113.7	110.3	124.1	93.8	98.6	96.0	106.0
IFFCO Kalol	43.7	47.0	41.2	39.4	45.1	38.0	51.6	40.8
GSFC Baoda	135.5	135.5	144.6	139.4	134.0	116.6	110.8	115.9
GNFC Bharuch	449.0	487.2	454.1	406.1	480.5	446.7	450.3	438.0
Sub Total (C)	**726.9**	**783.4**	**750.2**	**709.0**	**753.4**	**740.5**	**720.3**	**700.7**
D. Southern:								
MFL Madras	81.1	91.0	78.1	100.3	145.1	139.0	114.1	126.6
MFCL Mangalore	60.8	61.0	82.7	71.7	91.2	69.7	73.1	80.9
FACT Cochin	104.5	114.9	126.4	135.7	83.3	114.8	120.7	181.5
NLC	75.0	80.0	83.8	78.9	55.7	11.2	0.0	0.0
SPIC Tuticorin	182.6	184.6	178.0	178.3	170.6	188.3	132.9	139.4
FCI Ramagundam	6.6	8.6	9.4	11.4	13.6	0.0	0.0	0.0
Coromandal Fertilizers	20.9	42.5	46.0	46.7	39.9	21.4	19.0	22.3
Sub Total (D)	**531.5**	**582.6**	**604.4**	**623.0**	**599.4**	**544.4**	**472.3**	**538.2**
Total Fertilizers (A+B+C+D)	**2395.6**	**2724.3**	**2512.1**	**2613.2**	**2607.3**	**2576.3**	**2213.7**	**2277.2**
			(III) Petrochemical Plants:					
C. Western:								
Herdilla Chemicals Ltd.	na	na	na	na	na	7.8	9.1	15.9
IPCL Baroda	215.5	127.7	95.4	76.0	85.8	37.3	31.1	24.8
NOCIL Bombay	0.4	1.6	11.0	2.9	0.0	0.0	0.0	2.2
Reliance Industry Bombay	161.8	145.4	139.8	67.2	105.3	49.2	48.2	81.8
Sub Total (C)	**377.7**	**274.7**	**246.2**	**146.1**	**191.1**	**94.3**	**88.4**	**124.7**
D. Southern:								
FACT Udyogmandal	6.1	11.3	8.5	9.7	181.8	6.2	0.0	68.8
TNPL Chennai	47.9	63.0	56.7	45.2	59.7	68.6	69.7	66.4
Sub Total (D)	**54.0**	**74.3**	**65.2**	**54.9**	**78.5**	**74.8**	**69.7**	**135.2**
Total Petrochemical (C+D)	**431.7**	**349.0**	**311.4**	**201.0**	**269.6**	**169.1**	**158.1**	**259.9**

*Provisional

contd. ...

VI. 9 PLANT/CUSTOMER-WISEOFFTAKE OF FO/LSHS FROM 1994-95 TO 2001-02

(Qty. '000' Mts)

Category and Plant	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9
			(IV) Steel Plant					
B. Eastern:								
RSP Roukela	66.3	81.6	47.9	41.7	25.9	7.1	8.5	8.2
DSP Durgapur	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ASP Durgapur	13.7	13.4	4.7	14.3	9.6	8.4	7.4	11.3
TISCO Jamshedpur	33.9	5.2	0.0	0.0	0.0	1.0	0.0	0.1
BSP Bokaro	76.4	72.6	55.0	17.4	11.1	18.4	14.6	16.6
SAIL Bokaro	9.3	5.7	10.9	9.9	12.3	12.6	2.8	9.3
Sub Total (B)	209.1	178.5	118.5	83.3	56.9	47.5	33.3	45.5
C. Western:								
HSL Bhilai	27.2	25.7	26.4	14.4	14.4	15.7	13.0	8.6
Sub Total (C)	**7.2**	**25.7**	**26.4**	**14.4**	**14.4**	**15.7**	**13.0**	**8.6**
D. Sourthern								
Essar Steels	na	na	na	na	na	20.0	42.0	23.1
Jindal Steel	na	na	na	na	na	11.5	6.1	7.9
Vizag Steel Plant	2.8	7.5	2.8	3.7	12.6	21.8	3.8	0.0
VISL Bhadravati	na	na	na	na	na	7.9	9.1	7.0
Sub Total (D)	**2.8**	**7.5**	**2.8**	**3.7**	**12.6**	**61.2**	**61.0**	**35.0**
Total Steel (B+C+D+)	**239.1**	**211.7**	**147.7**	**101.4**	**85.9**	**124.4**	**107.3**	**92.1**
			(V) Others					
A. Northern:								
HCL Khetri	na	na	na	na	na	6.7	0.0	0.0
Hindalco	34.2	35.9	34.2	0.0	11.3	17.0	37.2	46.9
Sub Total (A)	**34.2**	**35.9**	**34.2**	**0.0**	**11.3**	**23.7**	**37.2**	**46.9**
B. Eastern:								
Indal Muri	na	na	na	na	na	3.5	8.3	8.9
Paradeep Phosph	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NALCO Angul	20.0	25.5	24.3	22.3	22.1	19.3	23.6	24.6
IRE Chatrapur	9.0	14.5	6.9	1.7	3.3	3.2	0.2	2.0
NALCO Damanjodi	65.6	65.1	68.8	68.0	65.7	62.7	69.9	84.3
OCL Ramshedpur	14.9	17.9	21.4	25.6	19.5	17.8	8.7	10.7
TELCO Jamshedpur	15.9	17.0	18.4	8.8	10.8	4.8	1.6	0.1
HCL Ghatsila	10.8	9.6	9.6	9.4	4.8	1.7	0.0	0.0
Sub Total(B)	**140.4**	**149.6**	**149.4**	**135.8**	**126.2**	**130.3**	**128.4**	**173.2**
C. Western:								
Phumphar Shipping	na	na	na	na	na	17.3	16.1	na
Balco Koprba	na	na	na	na	na	28.2	21.0	0.0
Bombay Dye & Mkg. Co	na	na	na	na	na	24.8	37.8	35.4
HOC Rasayani	9.3	9.2	10.8	14.0	18.1	6.9	0.3	0.0
HPC Mandovi Pellets	17.0	19.5	0.0	0.0	0.0	0.0	23.5	29.4
Sub Total (C)	**26.3**	**28.7**	**10.8**	**14.0**	**18.1**	**59.9**	**82.6**	**64.8**
D. Southern								
Grasim	12.7	12.9	6.8	7.0	2.8	0.0	0.0	0.0
S.I. Viscose	40.6	42.3	31.3	18.8	11.8	35.0	19.0	8.1
Indal Belgaum	46.0	54.9	54.6	33.5	38.5	44.5	39.9	12.1
Tex MACO	4.1	4.2	7.9	10.0	0.0	0.0	na	na
Ballarpur Ind.	13.6	9.1	5.5	6.7	17.6	19.8	17.1	0.8
Chem. Plast	41.6	41.5	45.9	53.1	62.1	75.0	75.9	82.5
HOC Cochin	19.8	21.2	20.0	22.6	16.5	20.9	19.9	23.0
Kudramuk Iron & Ore C.	39.4	44.1	55.5	64.9	70.8	68.7	60.4	83.2
FACT ASCL	51.1	61.8	68.2	60.8	60.1	111.4	108.5	7.0
Zuari	-	-	-	-	-	12.9	16.9	10.8
Sub Total (D)	**268.9**	**292.0**	**295.7**	**277.4**	**280.2**	**401.8**	**381.3**	**237.0**
Total Other (A+B+C)	**469.8**	**506.2**	**490.1**	**427.2**	**435.8**	**615.7**	**629.5**	**521.9**
			(VI) GENERAL TRADE					
A. Northern Region	**843.1**	**810.9**	**1095.2**	**1167.1**	**1348.8**	**1153.5**	**1340.0**	**1400.0**
B. Eastern Region	**461.4**	**446.5**	**490.9**	**509.5**	**539.9**	**433.6**	**388.8**	**394.7**
C. Western Region	**1913.3**	**2076.7**	**2232.2**	**2524.0**	**2547.9**	**2717.5**	**2374.3**	**2493.7**
D. Southern Regions	**941.0**	**1149.8**	**1294.7**	**1366.1**	**1779.3**	**1649.0**	**1589.9**	**1546.7**
Total General Trade	**4158.8**	**4483.9**	**5113.0**	**5566.7**	**6215.9**	**5953.6**	**5693.0**	**5835.1**
Grand Total (I+II+III+IV)	**9679.2**	**10705.3**	**10843.2**	**10974.2**	**11359.2**	**11579.3**	**11335.9**	**11571.8**

Source: Industry Performance Review, March, 2002

*Provisional

VI. 10 (a) STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA DURING 1999-00

State/Union Territories	Gas Stations				Diesel Stations	
	Natural Gas (MCM)	HSD (KL)	Naphtha (KL)	Genera-tion (GWH)	Diesel Oil (KL)	Generation (GWH)
1	2	3	4	5	6	7
NORTHERN REGION						
Haryana	0	0	0	0.00	0	0.00
Himachal Pradesh	0	0	0	0.00	0	0.00
Jammu & Kashmir	0	0	0	0.00	0	0.00
Punjab	0	0	0	0.00	0	0.00
Rajasthan	147	9269	0	227.90	0	0.00
Uttar Pradesh	0	0	0	0.00	0	0.00
Chandigarh	0	0	0	0.00	0	0.00
Delhi	263 E	28 E	0	743.66 E	0	0.00
Central Sector	2869 E	130000 E	82358 E	14466.00 E	0	0.00
WESTERN REGION						
Guarat	965	49508	671746	9224.29	20	0.10
Madhya Pradesh	0	0	0	0.00	0	0.00
Maharashtra	1639. E	0	79191 E	9156.48 E	0	0.00
Goa	0	0	0	0.00	0	0.00
Daman & Diu	0	0	0	0.00	0	0.00
D. & N. Haveli	0	0	0	0.00	0	0.00
Central Sector	1518 E	2773 E	0 E	7070.00 E	0	0.00
SOUTHERN REGION						
Andhra Pradesh	564	912	26300	3969.51	0	0.00
Karnataka	0	0	0	0.00	139469	708.00
Kerala	35	0	0	5.00	121350 E	579.00 E
Tamil Nadu	10	12784	66209	216.86	235349 E	1478.00 E
Lakshadweep	0	0	0	0.00	6580	19.39
Pondicherry	929	0	0	132.00	0	0.00
Central Sector	1099 E	0	0 E	1249.00 E	0	0.00
EASTERN REGION						
Bihar	0	0	0	0.00	0	0.00
Orissa	0	0	0	0.00	0	0.00
West Bengal	0	6384	0	12.29	40	0.20
D.V.C.	0	8092	269	21.07	0	0.00
A & N Islands	0	0	0	0.00	26757 E	104.00 E
Sikkim	0	0	0	0.00	208 E	1.05 E
Central Sector	0	0	0	0.00	0	0.00
NORTH EASTERN REGION						
Assam	371	0	0	859.17	0	0.00
Manipur	0	0	0	0	158	0.46
Meghalaya	0	0	0	0.00	0	0.00
Nagaland	0	0	0	0.00	35 E	0.25 E
Tripura	228 E	0	0 E	251.26 E	647 E	1.85 E
Arunachal Pradesh	0	0	0	0.00	4787	10.11
Mizoram	0	0	0	0.00	3903	8.00
Central Sector	583	0	0	1472.65	0	0.00
TOTAL (ALL INDIA)	**11220**	**219750**	**926073**	**49077.14**	**539303**	**2910.41**

KL: Kilo Litres
GWH: Gigawatt Hour
MCM: Million Cubic Metres
E: Estimated
LTS./KWH: Litres per Kilowatt Hour
Source: Central Electricity Authority

VI. 10 (b) STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA DURING 2000-01

State/Union Territories	Gas Stations				Diesel Stations	
	Natural Gas (MCM)	HSD (KL)	Naphtha (KL)	Genera-tion (GWH)	Diesel Oil (KL)	Generation (GWH)
1	2	3	4	5	6	7
NORTHERN REGION						
Haryana	0	0	0	0.00	0	0.00
Himachal Pradesh	0	0	0	0.00	0	0.00
Jammu & Kashmir	0	0	0	0.00	0	0.00
Punjab	0	0	0	0.00	0	0.00
Rajasthan	147	9269	0	228.00	0	0.00
Uttar Pradesh	0	0	0	0.00	0	0.00
Chandigarh	0	0	0	0.00	0	0.00
Delhi	344	30	0	1139.22	0	0.00
Central Sector	3072	139211	88194	15491.00	0	0.00
WESTERN REGION						
Gujarat	847	687593	469945	6453.27	0	0.00
Madhya Pradesh	0	0	0	0.00	0	0.00
Maharashtra	1259	0	60838	7033.91	0	0.00
Goa	55	0	0	304.63	0	0.00
Daman & Diu	0	0	0	0.00	0	0.00
D. & N. Haveli	0	0	0	0.00	0	0.00
Central Sector	1608	2937	0	7488.00	0	0.00
SOUTHERN REGION						
Andhra Pradesh	513	3260	130000	4585.73	0	0.00
Karnataka	0	131190	0	1900.46	131190	671.00
Kerala	1071	0	0	152.80	152933	775.30
Tamil Nadu	17	4128	66479	214.96	257792	1402.82
Lakshadweep	0	0	0	0.00	6811	18.92
Pondicherry	1631	0	0	234.14	0	0.00
Central Sector	1711	0	0	1944.00	0	0.00
EASTERN REGION						
Bihar	0	0	0	0.00	0	0.00
Orissa	0	0	0	0.00	0	0.00
West Bengal	0	3229	0	6.30	0	0.00
D.V.C.	0	7172	254	18.06	0	0.00
A & N Islands	0	0	0	0.00	28300	110.00
Sikkim	0	0	0	0.00	188	0.95
Central Sector	0	0	0	0.00	0	0.00
NORTH EASTERN REGION						
Assam	443	0	0	969.63	0	0.00
Manipur	0	0	0	0.00	653	1.90
Meghalaya	0	0	0	0.00	0	0.00
Nagaland	0	0	0	0.00	26	0.20
Tripura	211	0	0	232.17	647	1.85
Arunachal Pradesh	0	0	0	0.00	4787	10.00
Mizoram	0	0	0	0.00	1827	5.94
Central Sector	607	0	0	1662.20	0	0.00
TOTAL (ALL INDIA)	**13536**	**988019**	**815710**	**50058.48**	**585154**	**2998.88**

KL: Kilo Litres
GWH: Gigawatt Hour
MCM: Million Cubic Metres
LTS./KWH: Litres per Kilowatt Hour
Source: Central Electricity Authority

VI. 11 (a) STATE-WISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 1999-00

State/Union Territories	Steam Stations					
	Coal (TMT)	Lignite (TMT)	Furnace Oil (KL)	HSD/ LDO (KL)	LSHS/ HHS (KL)	Natural Gas (MCM)
1	2	3	4	5	6	7
NORTHERN REGION						
Haryana	3062	0	2985	2740	18586	0
Himachal Pradesh	0	0	0	0	0	0
Jammu & Kashmir	0	0	0	0	0	0
Punjab	7418	0	0	2235	19917	0
Rajasthan	4643	0	12333	827	0	0
Uttar Pradesh	14512	0	68162	14995	0	0
Chandigarh	0	0	0	0	0	0
Delhi	1416	0	0	14845	4686	0
Central Sector	26296	0	46639	0	0	0
WESTERN REGION						
Gujarat	15269	1088	50148	5863	649018	0
Madhya Pradesh	15649	0	47113	12945	0	0
Maharashtra	29656	0	69330	9861	1275794	25407*
Goa	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0
D. & N. Haveli	0	0	0	0	0	0
Central Sector	19255	0	17409	0	0	0
SOUTHERN REGION						
Andhra Pradesh	16099	0	19273	4159	0	0
Karnataka	5526	0	18755	643	0	0
Kerala	0	0	0	0	0	0
Tamil Nadu	13680	0	136673	4866	0	0
Lakshadweep	0	0	0	0	0	0
Pondicherry	0	0	0	0	0	0
Central Sector	10458	16190	9161	440	14679	0
EASTERN REGION						
Bihar	2977	0	26274	50236	0	0
Orissa	2710	0	3509	7409	0	0
West Bengal	10902	0	3971	55289	0	0
D.V.C.	5483	0	38669	76159	0	0
A & N Islands	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0
Central Sector	17224	0	30944	0	0	0
NORTH EASTERN REGION						
Assam	116	0	4310	798	12405	0
Manipur	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0
Tripura	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0
Central Sector	0	0	0	0	0	0
TOTAL (ALL INDIA)	**222351**	**17278**	**605658**	**264310**	**1995085**	**25407***

TMT: Thousand Metric Tonnes
MCM: Million Cubic Metres
Source: Central Electricity Authority

KL: Kilo Litres
*: Refinery Gas MTs

VI. 11 (b) STATE-WISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 2000-01

State/Union Territories	Steam Stations					
	Coal (TMT)	Lignite (TMT)	Furnace Oil (KL)	HSD/ LDO (KL)	LSHS/ HHS (KL)	Natural Gas (MCM)
1	2	3	4	5	6	7
NORTHERN REGION						
Haryana	2899	0	0	2779	18421	0
Himachal Pradesh	0	0	0	0	0	0
Jammu & Kashmir	0	0	0	0	0	0
Punjab	10161	0	517	1660	23482	0
Rajasthan	5785	0	12352	780	0	0
Uttar Pradesh	15139	0	41280	26968	0	0
Chandigarh	0	0	0	0	0	0
Delhi	1304	0	0	9538	4261	0
Central Sector	28152	0	80818	0	0	0
WESTERN REGION						
Gujarat	15940	1144	7151	5951	52094	0
Madhya Pradesh	16020	0	52788	12892	0	0
Maharashtra	29222	0	90346	12864	1457438 E	29383
Goa	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0
D. & N. Haveli	0	0	0	0	0	0
Central Sector	19704	0	17608	0	0	0
SOUTHERN REGION						
Andhra Pradesh	16367	0	18031	3467	0	0
Karnataka	6019	0	13339	281	0	0
Kerala	0	0	0	0	0	0
Tamil Nadu	14432	0	90667	2807	0	0
Lakshadweep	0	0	0	0	0	0
Pondicherry	0	0	0	0	0	0
Central Sector	10478	17344	9388	228	0	0
EASTERN REGION						
Bihar	3184	0	17372	41895	350	0
Orissa	2467	0	3573	5095	0	0
West Bengal	11635	0	2257	62266	0	0
D.V.C.	5905	0	42699	75953	0	0
A & N Islands	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0
Central Sector	15105	0	31468	0	0	0
NORTH EASTERN REGION						
Assam	82	0	4501	929	0	0
Manipur	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0
Tripura	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0
Central Sector	0	0	0	0	0	0
TOTAL (ALL INDIA)	**230000**	**18488**	**536155**	**266353**	**1556046**	**29383**

TMT: Thousand Metric Tonnes
MCM: Million Cubic Metres
KL: Kilo Litres
E: Estimated.
Source: Central Electricity Authority

VII. FOREIGN TRADE

VII.1 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS FROM 1970 to 2001.

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

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
1985	14811	3808.74	4292	1440.70	19103	5249.44
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
1997	33573	17061.19	19839	14131.47	53412	31192.66
1998 (e)	38479	15156.00	23572	12784.00	62051	27940.00
1999 (e)	53306	33750.00	18400	13708.00	71706	47458.00
2000 (e)	70024	59456.00	11103	12616.00	81127	72072.00
2001 (e)	77554	61781.00	7574	8462.00	85128	70243.00
		EXPORTS				
1970	—	—	412	5.72	412	5.72
1975	—	—	166	13.83	166	13.83
1980	—	—	70	17.98	70	17.98
1985	2044	503.88	1695	482.06	3739	985.94
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
1997	—	—	2833	1926.84	2833	1926.84
1998 (e)	—	—	1135	546.00	1135	546.00
1999 (e)	—	—	739	600.00	739	600.00
2000 (e)	—	—	6460	5929.00	6460	5929.00
2001 (e)	—	—	9657	8131.00	9657	8131.00
		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
1985	12767	3304.86	2597	958.64	15364	4263.50
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
1997	33573	17061.19	17008	12204.63	50579	30099.07
1998 (e)	38479	15156.00	22437	12238.00	60916	27394.00
1999 (e)	53306	33750.00	17661	13108.00	70967	46858.00
2000 (e)	70024	59456.00	4643	6687.00	74667	66143.00
2001 (e)	77554	61781.00	2083	331.00	75471	62112.00

Provisional (e) Estimated
Source: IOC and PPAC

VII. 2 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS FROM 1970-71 to 2001-02.

(Qty. "000' Tonnes, Value: Rs. Crore)

Year	Crude Oil		Petroleum Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	
		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	7269	1917.34	23537	5266.54
1985-86	15144	3686.80	3865	1273.90	19009	4960.40
1990-91	20699	6118.42	8660	4660.21	29359	10778.63
1991-92	23994	7820-05	9445	5218.27	33439	13038.32
1992-93	29247	10685.86	11283	6359.60	40530	17045.46
1993-94	30822	10682.52	12076	7041.93	42898	17729.95
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
1997-98	34494	15872	22970	14309	57463	30181
1998-99	39808	14917	23772	12276	63580	27193
1999-00	57805	40028	16607	14185	74412	54213
2000-01	74097	65932	9267	12093	83364	78025
2001-02*	78706	60397	7009	7249	85715	67646
		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
1985-86	528	135.15	1963	509.58	2491	644.73
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	2084.78	3162	2084.78
1997-98	—	—	2381	1266	2381	1266
1998-99	—	—	720	306	720	306
1999-00	—	—	746	698	746	698
2000-01	—	—	8365	7672	8365	7672
2001-02*	—	—	10085	8285	10085	8285
		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
1985-86	14616	3591.65	1902	764.02	16518	4315.67
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	38864	16221.14
1994-95	27349	10316.03	10697	5934.33	38046	16250.36
1995-96	27342	11517.00	16900	10745.92	44242	22262.92
1996-97	33906	18538.19	17103	13548.71	51009	32086.90
1997-98	34494	15872	20589	13043	55082	28915
1998-99	39808	14917	23052	11970	62860	26887
1999-00	57805	40028	15861	13487	73666	53515
2000-01	74097	65932	902	4421	74999	70353
2001-02	78706	60397	-3076	-1036	75630	59361

*Provisional

Source: IOC and PPAC

VII. 3 IMPORTS/EXPORTS OF CRUDE OIL AND PETRLEUM PRODUCTS(e)

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

ITEM	1998		1999		2000		2001	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9
			GROSS IMPORTS					
A. Crude Oil	38479	15156	53306	33750	70024	59456	77554	61781
B. Pol. Products								
I. Light Distillates	**4150**	**2704**	**3724**	**3524**	**3890**	**5020**	**3980**	**4575**
1. LPG	1598	1207	1621	1669	1037	1449	708	941
2. Naphtha	22724	1286	2040	1807	2853	3571	3272	3634
3. MS	278	211	63	48	0	0	0	0
II. Middle Distillates	**17531**	**9379**	**12815**	**9127**	**4270**	**4106**	**798**	**917**
1. ATF	17	13	2	4	1	3	2	8
2. SKO	6397	3661	6501	5136	3017	3175	773	888
3. HSD	11117	5705	6312	3987	1252	928	23	21
III. Heavy Ends	**1891**	**701**	**1861**	**1057**	**2943**	**3940**	**2796**	**2970**
1. FO/LSHS	1431	515	1457	799	1640	1198	1501	1100
2. Lubes/ Others	460	186	404	258	1303	2292	1295	1870
TOTAL (B)	**23572**	**12784**	**18400**	**13708**	**11103**	**12616**	**7574**	**8462**
GRAND TOTAL (A+B)	**62051**	**27940**	**71706**	**47458**	**81127**	**72072**	**85128**	**70243**
			EXPORTS					
Pol. Products								
I. Light distillates	**1052**	**526**	**715**	**571**	**3344**	**3866**	**4827**	**4978**
1. Naphtha	1052	526	617	467	2307	2585	2622	2543
2. MS	0	0	98	104	934	1116	2105	2288
3. TAME	0	0	0	0	103	165	100	147
II. Middle Distillates	**0**	**0**	**0**	**0**	**1318**	**1535**	**2753**	**2572**
1. HSD/LDO	0	0	0	0	1198	1404	2567	2396
2. ATF	0	0	0	0	120	131	186	176
III. Heavy Ends	**83**	**20**	**24**	**29**	**1798**	**528**	**2077**	**581**
1. FO/LSHS	83	20	0	0	381	240	489	271
2. Others	0	0	24	29	1417	288	1588	310
TOTAL	**1135**	**546**	**739**	**600**	**6460**	**5929**	**9657**	**8131**
			NET IMPORTS					
A. Crude Oil	**38479**	**15156**	**53306**	**33750**	**70024**	**59456**	**77554**	**61781**
B. Pol. Products	**22437**	**12238**	**17661**	**13108**	**4643**	**6687**	**-2083**	**331**
GRAND TOTAL	**60916**	**27394**	**70967**	**46858**	**74667**	**66143**	**75471**	**62112**

(e): Estimated
Source: Petroleum Planning & Analysis Cell, New Delhi.
HEI: Includes Bitumen, Low Sulphur Waxy Residue etc.
TAME: Tertiary Amyl Methyl ether.
HEE: Includes Coke and Vaccum Gas Oil.

VII. 4 IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS

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

TEM	1998-99		1999-00		2000-01		2001-02	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9
			GROSS IMPORTS					
A. Crude Oil	**39808**	**14917**	**57805**	**40028**	**74097**	**65932**	**78706**	**60397**
B. Pol. Products								
I. Light Distillates	**4380**	**2800**	**3504**	**3765**	**4018**	**5438**	**3967**	**4287**
1. LPG	1722	1273	1587	1801	853	1332	659	810
2. Naphtha	2407	1336	1917	1964	3165	4106	3308	3477
3. MS	251	191	0	0	0	0	0	0
II. Middle Distillates	**17300**	**8725**	**11319**	**9260**	**1919**	**2389**	**424**	**425**
1. ATF	3	4	1	4	1	3	2	9
2. SKO	7066	3913	6312	5543	1918	2386	391	388
3. HSD	10231	4808	5006	3713	0	0	31	28
III. Heavy Ends	**2092**	**750**	**1784**	**1160**	**3330**	**4266**	**2618**	**2537**
1. FO/LSHS	1696	602	1377	865	1728	1309	1425	1030
2. Lubes/ Others	396	148	407	295	1602	2957	1193	1507
TOTAL (B)	**23772**	**12275**	**16607**	**14185**	**9267**	**12093**	**7009**	**7249**
GRAND TOTAL (A+B)	**63580**	**27192**	**74412**	**54213**	**83364**	**78025**	**85715**	**67646**
			EXPORTS					
Pol. Products								
I. Light distillates	**720**	**306**	**714**	**659**	**4221**	**4935**	**5028**	**4993**
1. Naphtha	720	306	583	520	2882	3273	2535	2300
2. Mogas	0	0	131	139	1202	1442	2406	2570
3. TAME	0	0	0	0	137	220	87	123
II. Middle Distillates	**0**	**0**	**0**	**0**	**1767**	**2055**	**3084**	**2747**
1. HSD/LDO	0	0	0	0	1607	1881	2890	2571
2. ATF	0	0	0	0	160	174	194	176
III. Heavy Ends	0	0	32	39	2377	682	1973	545
1. FO/LSHS	0	0	0	0	508	320	482	255
2. Others	0	0	32	39	1869	362	1491	290
TOTAL	**720**	**306**	**746**	**698**	**8365**	**7672**	**10085**	**8285**
			NET IMPORTS					
A. Crude Oil	39808	14917	57805	40028	74097	65932	78706	60397
B. Pol. Products	23052	11969	15861	13487	902	4421	-3076	-1036
GRAND TOTAL	**62860**	**26886**	**73666**	**53515**	**74999**	**70353**	**75630**	**59361**

Note: Value of private imports is based on actual value of PSU imports.
Source: Petroleum Planning & Analysis Cell, New Delhi.
HEI: Includes Bitumen, Low Sulphur Waxy Residue etc.
*: Provisional.
TAME: Tertiary Amyl Methyl ether.
HEE: Includes Coke and Vaccum Gas Oil.

VII. 5 TRENDS IN INDIA'S OVERALL TRADE BALANCE AND TRADE BALANCE WITH OPEC COUNTRIES

(Rs. Crore)

Year	India's Overall Trade					India's Trade with OPEC Countries					% of India's Trade with-OPEC to India's total trade	
	Exports (including Re-export)	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
1975-76	4036	5265	-1229	21.2	16.5	633	1166	533	35.5	6.0	15.7	22.1
1980-81	6711	12549	-5838	4.6	37.3	745	3488	-2743	3.9	44.7	11.1	27.8
1985-86	10895	19658	-8763	7.2	14.7	835	3420	-2585	-11.5	2.8	7.7	17.8
1990-91	32553	43198	-10645	17.7	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	89971	-7297	18.5	23.1	7631	19002	11371	2.1	16.0	9.2	21.1
1996-96	106353	122678	-16325	28.6	36.4	10300	25586	-15286	35.0	34.6	10.7	20.9
1996-97	118817	138920	-20103	11.7	13.2	11475	36135	-24660	11.4	41.2	9.9	26.0
1997-98	130100	154176	-24076	9.5	11.0	13110	34950	-21840	14.2	-3.3	10.1	22.7
1998-99	139752	178332	-38580	7.4	15.7	14982	32711	-17719	14.4	-6.4	10.7	18.3
1999-00	159561	215236	-55675	14.2	12.1	16910	48394	-31484	12.8	47.9	10.6	22.5
2000-01	203571	230873	-27302	27.6	7.3	22223	12385	+9838	31.4	25.6	10.9	5.4
2001-02*	209018	245199	-36181	2.7	6.2	25016	14215	+10801	12.6	14.8	12.0	5.8

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

*-Provisional.

VII. 6 INDIA'S FOREIGN EXCHANGE RESERVES (1970-71 to 2001-2002)

Year	S.D.R.S Million	GOLD* (Rs. Crore)	Foreign Exchange (Rs. Crore)
(1)	(2)	(3)	(4)
1970-71	148.9	182.53	438.12
1975-76	202.8	182.53	1491.70
1980-81	490.5	225.58	4822.12
1985-86	115.1	274.28	7384.35
1990-91	75.9	6828.30	4386.10
1991-92	65.7	9038.8	14578.00
1992-93	12.7	10548.80	20140.50
1993-94	76.5	12794.10	47287.00
1994-95	4.6	13751.80	66005.6
1995-96	55.9	15658.50	58445.9
1996-97	1.4	14557.20	80367.5
1997-98	1.0	13394.00	102506.7
1998-99	6.0	12559	125412
1999-00	3.0	12972.6	152924
2000-01	2.0	12711	184482
2001-02	-8.0	14868	249118

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 1970-71 TO 2001-02

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
1980-81	5266	5268	6711	6703	78.5	78.4
1985-86	4961	4316	10895	10250	45.5	42.1
1990-91	10779	9775	32558	31554	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	34547	32826	118817	104328	29.1	31.5
1997-98	30181	28915	130101	117058	23.2	24.7
1998-99	27193	26887	139753	127783	19.5	21.0
1999-00	54214	53516	159561	146073	34.0	36.6
2000-01	78025	70353	203571	199150	38.3	35.3
2001-02	67646	59361	207746	208782	32.6	28.4

Source: For col. 4; Ministry of Commerce, DGCI & S. Calcutta.

VIII. MANPOWER

VIII. 1 MANPOWER EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA 1991-2002 (As on 1st April)

(Number)

CATEGORY	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Exploration & Production	58187	58627	58864	58590	57633	50244	48585	52909	51656	50942	50049	49540
2. Refining	26479	29856	23386	22589	23031	24622	20723	25294	37619	27019	27178	25322
3. Marketing	33074	35353	38414	39255	34270	37321	38744	37943	41806	41110	40852	41865
4. Pipelines	3579	3711	3312	3654	3619	3712	3934	3782	3803	4180	4196	4094
5. R&D	—	—	3035	3048	2953	2935	2901	2832	2869	2858	2723	2797
6. Others	8359	8446	14340	14359	14959	20770	21958	15249	13580	13293	9990	9992
Grand Total	**129678**	**135793**	**141351**	**141495**	**136435**	**139604**	**136845**	**138009**	**151333**	**139402**	**134988**	**133610**

VIII. 2 CATEGORY-WISE MANPOWER EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA 1991-2002 (As on 1st April)

(Number)

CATEGORY	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Executive/ Managerial	32446	35848	39434	40479	40282	41460	40770	42836	43237	43971	44804	45385
2. Supervisory	12744	11713	9623	9593	9245	8467	12295	12908	12142	12551	11807	13138
3. Clerical	15993	17511	17633	16388	16934	16102	15520	15927	14795	13627	14127	13014
4. Workmen	63795	65479	66201	66656	64722	65045	61174	61000	61057	60292	57693	54860
5. Total	124978	130551	132891	133116	131183	131074	129759	132671	131231	130441	128431	126397
6. Expatriates/ Foreign Experts/ on Contract	4700	5242	8460	8379	5252	8530	7086	5338	20102	8961	6557	7213
GRAND TOTAL	**129678**	**135793**	**141351**	**141495**	**136435**	**139604**	**136845**	**138009**	**151333**	**139402**	**134988**	**133610**

VIII. 3. CATEGORY-WISE MANPOWER EMPLOYED IN VARIOUS SECTORS OF PETROLEUM INDUSTRY IN INDIA 1991—2002
(As on 1st April)

(Number)

CATEGORY	1991	1995	1996	1997	1998	1999	2000	2001	2002
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
EXPLORATION AND PRODUCTION									
1. Executive/ Managerial	17473	17555	17636	17318	17637	17846	17867	18560	19461
2. Supervisory	6040	4279	3272	4865	6513	6005	5824	5087	6601
3. Clerical	4728	4532	3870	3526	4305	4117	3797	3971	3278
4. Workmen	28610	30295	25400	22793	24444	23678	23133	22431	20200
5.TOTAL	**56851**	**56661**	**50178**	**48502**	**52899**	**51646**	**50621**	**50049**	**49540**
6. Expatriates/ Foreign Experts/on Contract	1336	972	66	83	10	10	321	0	0
GRAND TOTAL	**58187**	**57633**	**50244**	**48585**	**52909**	**51656**	**50942**	**50049**	**49540**
PETROLEUM REFINING@									
1. Executive/Managerial	5287	4271	5450	4236	5746	5079	5175	5534	5556
2. Supervisory	1471	1195	642	1719	2269	1922	1928	2740	2589
3. Clerical	3256	2479	2129	2033	2804	2092	1886	2748	2587
4. Workmen	14856	11893	12546	11144	12504	13434	13652	13017	12338
5.TOTAL	**24870**	**19838**	**20767**	**19132**	**23323**	**22527**	**22641**	**24039**	**23070**
6. Expatriates/ Foreign Experts/on Contract	1609	3193	3855	1591	1971	15092	4378	3139	2252
GRAND TOTAL	**26479**	**23031**	**24622**	**20723**	**25294**	**37619**	**27019**	**27178**	**25322**
MARKETING									
1. Executive/ Managerial	7884	8678	8978	9623	9522	10864	10924	11619	11649
2. Supervisory	2041	2314	2482	2721	2524	2584	2605	2188	2274
3. Clerical	5746	5566	5392	5428	5190	5916	5910	5726	5434
4. Workmen	15716	17291	17216	17719	17454	18128	18125	18010	17956
5.TOTAL	31387	33849	34068	35491	34690	37492	37564	37543	37313
6. Expatriates/ Foreign Experts/on Contract	1687	421	3253	3253	3253	4314	3546	3309	4552
GRAND TOTAL	**33074**	**34270**	**37321**	**38744**	**37943**	**41806**	**41110**	**40852**	**41865**

@ Includes IOC's Head Office, Regional Offices.

IX. PRICES

IX.1 WHOLESALE PRICE INDICES OF SELECTED PETROLEUM PRODUCTS

(1993-94=100)

Products	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
LPG	109.5	131.4	150.0	162.0	176.1	248.2	266.6
Petrol	106.5	131.1	144.5	148.1	148.1	154.2	158.1
High Speed Diesel Oil	108.8	120.9	145.2	148.7	176.4	228.8	252.3
Light Diesel Oil	109.4	133.7	141.8	143.4	168.2	232.2	243.8
Kerosene	100.0	100.8	101.1	100.9	101.9	270.2	304.0
Furnace Oil	99.4	120.3	118.3	108.6	131.2	203.5	187.5
Aviation Turbine Fuel	99.7	107.1	109.6	109.6	109.9	144.2	152.1
Lubricating Oil	105.0	119.0	123.9	130.0	134.9	142.6	147.6
Naphtha	100.0	119.8	144.8	146.1	191.0	294.7	265.6
Bitumen	100.0	126.6	145.1	145.6	156.7	203.5	214.2
All commodities	121.6	127.2	132.8	140.7	145.3	155.7	161.3

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

IX.2 (a) PRICES OF INDIGENOUS CRUDE OIL IN INDIA WITH RATE OF ROYALTY & OIL DEVELOPMENT CESS

(Rs./MT)

Effective date	BASIC PRICE	ROYALTY	CESS	BASIC RATE	S.TAX ON BASIC RATE	TOTAL
1	2	3	4	5	6	7
upto 13.7.75	on import parity basis Rs. 713.04/MT					
(A) ONSHORE CRUDE (ON LONG RUN SOCIAL MARGINAL COST BASIS ADOPTED)						
14.07.75	270.04	-	-	270.04	-	270.04
08.09.76	245.42	-	60.00	305.42	-	305.42
16.12.77	203.42	42.00	60.00	305.42	-	305.42
01.04.81	203.42	61.00	60.00	324.42	-	324.42
(B) OFFSHORE CRUDE						
16.12.77	331.65	42.00	60.00	433.65	-	433.65
01.04.81	331.65	61.00	60.00	452.65	-	452.65
(C) OFFSHORE & ONSHORE CRUDE*						
11.07.81	1021.00	61.00	100.00	1182.00	-	1182.00
15.02.83	1021.00	61.00	300.00	1382.00	-	1382.00
01.04.84	1021.00	192.00	300.00	1513.00	5.24	1518.24
01.03.87	1021.00	192.00	600.00	1813.00	17.24	1830.24
01.04.87	1021.00	314.00	600.00	1935.00	22.12	1957.12
01.02.89	1021.00	314.00	900.00	2235.00	34.12	2269.12
01.04.90	1021.00	481.00	900.00	2402.00	40.80	2442.80
16.09.92	1506.00	481.00	900.00	2887.00	115.48	3002.48
01.04.93	1796.00	**539.80	900.00	3235.80	129.43	3365.23
01.04.96	**2094.00	**578.00	900.00	3572.00	142.88	3714.88

1.4.1998 w.e.f. 1.4.98, price of indigenous crude has been linked to weighted average FOB price of actual import of crude with the floor price of Rs. 1991/MT for the basic price payable to ONGC/OIL exclusive of cess of Rs. 900/MT and royalty as per methodology given below. the price is fixed on monthly basis. Upper ceiling of Rs. 5570/MT has also been fixed by the Government w.e.f. January 2000. Royalty for the period April'98-May'99 was payable at the rate of Rs. 578/MT.

Jun-99 Effective June 1999, royalty is being paid based on the revised formula. The methodology for arriving at the well head-value is as under:
i) Royalty amount may be deducted from the selling price after applying 8% debit on this amount to arrive at the well-head value.
ii) Cess for the time being may not be deducted from the selling price to arrive at the well-head value of the crude oil.
iii) 20% of well-head value would be considered for working out the royalty subject to an upper ceiling of Rs. 850/MT w.e.f. 1.12.99.
For the period 1.6.99 to 30.11.99 upper ceiling of royalty was Rs.750/MT.

1.4.2002 As per Govt. notification No. 79 dated March 28, 2002 the price of indigenous crude oil of ONGC and OIL will be market determined w.e.f. 1.4.2002

* Long run social marginal cost basis given up. **Provisional.

Source: Petroleum Planning & Analysis Cell, New Delhi.

IX. 2(b) CONSUMER PRICES OF NATURAL GAS

(Excluding Royalty, Taxes and All Statutory Levies)

(Rs./'000' cubic metres)

Effective Date	Off-shore (Landfall point) and On-shore	Gas along HBJ Pipelines	For North-Eastern States	Calorific Value Range (K. Cal/SCM)
01.01.1995	1850	2700	1000	9000-9500
01.10.1997	2150	3300	1200	10000
01.01.1998	2411	3561	1315	10000
01.04.1998	2271	3421	1250	10000
01.07.1998	2246	3396	1307	10000
01.10.1998	2222	3372	1200	10000
01.01.1999	2215	3365	1274	10000
01.04.1999	2167	3317	1224	10000
01.07.1999	2499	3649	1499	10000
01.10.1999	2850	4000	1700	10000
01.04.2000	2850	4000	1700	10000
01.04.2001	2850	4000	1700	10000
01.04.2002	2850	4000	1700	10000

Note:

1. The price of gas was linked to a calorific value range of 9000-9500 K Cal/Standard Cubic Metres (SCM) during 01.01.1992 to 30.09.1997 and w.e.f. 1.10.1997, it has been linked to the international price of a basket of LSHS Fuel Oils and net calorific value of 10000 K. Cal. Per 1000 SCM.
2. w.e.f. 01.10.1997 gas price along HBJ pipeline includes Rs. 1150 per 1000 SCM towards transportation charges. The transportation charges along HBJ pipeline are being increased by 1% for every 10% increase in CPI and are linked to the calorific value of 8500 K. Cal./SCM.
3. The discount of Rs. 400 per 1000 SCM was applicable in case of gas price for North Eastern States upto 30.09.1997 thereafter w.e.f. 01.10.1997 the applicable discount in case of gas price for North Eastern States is Rs. 300 per 1000 SCM.
4. Other than HBJ pipeline, GAIL/transporters are permitted to negotiate transportation charges with the consumers.
5. ONGC/OIL/GAIL are permitted to sell gas from marginal/isolated field to be developed after 1.10.97 at market driven prices.

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

Effective Date	ATF	MS-87-AKI-84 (89 RON)	MS-AKI-84 (0.05% Sulphur)	MS-AKI-84 (88/89 RON) (0.05% Sulphur & 1% Benzene)	MS-93	HSDO	HSD (0.05% Sulphur)	SKO (PDS)	LPG
(.....Rs./Kl.....)									(Rs./MT)
1	2	3	4	5	6	7	8	9	10
7.7.1996	10838	16055			19180	6575		2001	6902
2.9.1997	10838	17055			20180	8375		2001	7958
1.4.1998	10838	17055			20180	7839		2001	7958
3.6.1998	10838	15495			18335	7537		2001	7958
1.2.1999	10838	15495			18335	6722		2001	8944
28.2.1999	10759	15399			18239	6622		2001	8733
6.10.1999	10759	15399			18239	9635		2001	8733
23.3.2000	12759	15399	15479		18239	9635	10034	4501	10846
30.9.2000	14759	18999	19079		21839	11935	12334	7001	13029
22.11.2000		18999	19079			11935	12334	6110	12427
12.1.2002		10820	10900	11120		11040	11440	6110	12427
28.2.2002								6860	13029
17.3.2002									11932

Source: Petroleum Planning & Analysis Cell, New Delhi

IX. 4 EX-STORAGE POINT PRICES OF MAJOR INDUSTRIAL PETROLEUM PRODUCTS (EXCLUSIVE OF DUTIES ETC.)

Product	Selling Unit	Refinery	w.e.f. 1.7.01		w.e.f. 16.7.01	w.e.f. 1.8.01	w.e.f. 16.8.01	w.e.f. 1.9.01	w.e.f. 16.9.01	w.e.f. 16.10.01	w.e.f. 1.11.01	w.e.f. 20.11.01	w.e.f. 1.12.01	w.e.f. 16.12.01	w.e.f. 1.1.02	w.e.f. 16.1.02	w.e.f. 16.2.02	w.e.f. 1.3.02	w.e.f. 16.3.02
			Fert.	Others															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Naphtha	Rs./MT	Mathura	13790	14390	13120	12460	12710	12460	12950	11590	11190	10670	10290	10150	10330	11040	11350	11620	12710
		Barauni	13650	14250	12980	12320	12570	12320	12810	11450	11430	10830	10440	10310	10480	11160	11440	11710	12790
		Koyali	13540	14140	12870	12210	12460	12210	12700	11340	10940	10420	10040	9900	10080	10790	11100	11370	12460
		Panipat	13910	14510	13240	12580	12830	12580	13070	11710	11310	10790	10410	10270	10450	11160	11470	11740	12830
		Port. Ref.	13220	13820	12550	11890	12140	11890	12380	11020									
		Mumbai									10700	10100	9720	9580	9760	10470	10780	11050	12140
		Haldia									11000	10400	10010	9880	10050	10730	11010	11280	12360
FO	Rs./Kl	Mathura	8690	8690	8180	8430	8700	8950	9330	8850	8440	7780	7350	7510	7690		7900	8120	8570
		Koyali	8460	8460	7950	8200	8470	8720	9100	8620	8210	7550	7120	7280	7460		7670	7890	8340
		Port. Ref.	8160	8160	7650	7900	8170	8420	8800	8320									
		Mumbai									7990	7250	6820	6980	7160		7370	7590	8040
		Haldia									8290	7550	7120	7290	7460		7600	7810	8270
LSHS	Rs./MT	Mathura	9110	9110	8570	8840	9130	9390	9800	9290	8850	8140	7680	7850	8040		8370	8600	9090
		Barauni	9170	9170	8630	8900	9190	9450	9860	9350	9310	8520	8060	8240	8420		8570	8800	9290
		Koyali	8860	8860	8320	8590	8880	9140	9550	9040	8600	7890	7430	7600	7790		8020	8250	8740
		Panipat	9230	9230	8690	8960	9250	9510	9920	9410	8970	8260	7800	7970	8260		8490	8720	9210
		Port. Ref.	8740	8740	8200	8470	8760	9020	9430	8920									
		Mumbai									8560	7770	7310	7480	7670		7900	8130	8620
		Vizag									8830	8040	7580	7750	7940		8100	8330	8820

Note: Naphtha/FO and LSHS prices w.e.f. 9.7.2001 are for other than fertilizer use. Naphtha/FO and LSHS prices for non-fertilizer customers w.e.f. 1.11.2001 would be based on port-wise pricing method.

Source: Petroleum Planning & Analysis Cell, New Delhi.

IX. 5 PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1 .4.2002

Market	N. Delhi	Calcutta	Mumbai	Chennai	Kanpur
	MOTOR SPIRIT (Rs./KL)				
	.05%S+1%B	.05%S	.05%S+1%B	05%S	.25%S
Storage Point Price	11120.00	10900.00	11120.00	10900.00	10820.00
State Surcharge	4.00	605.00	171.00	795.00	336.00
BMC Surcharge	0.00	0.00	859.00	0.00	0.00
Siding Charge	5.84	0.00	0.00	0.00	51.90
PL Charges	0.00	0.00	0.00	0.00	0.00
RLY/Ocean/Freight	91.96	29.87	0.00	0.00	197.79
RPO Surcharge	36.00	36.00	36.00	36.00	36.00
RPO Charge	4.36	4.36	4.36	4.36	4.36
Ass. Value Adj.	-231.97	-271.87	-527.31	-577.07	-254.82
Assesable Value.	11030.19	11303.36	11663.05	11158.29	11191.23
Excise Duty Rate (0%)	32.00%	32.00%	32.00%	32.00%	32.00%
Excise Duty Amount	3529.66	3617.08	3732.18	3570.65	3581.19
Sub Total	14559.85	14920.44	15395.23	14728.94	14772.42
Ass. Value Adj.	0.00	0.00	0.00	0.00	0.00
Red. to Arr. Contrl Price	4.36	4.36	4.36	4.36	4.36
RPO Charge	48.36	48.36	48.36	48.36	48.36
Spl. Excise Duty	7000.00	7000.00	7000.00	7000.00	7000.00
Sub Total	21603.85	21964.44	22439.23	21772.94	21816.42
Road Bridging Charges	0.00	0.00	0.00	0.00	0.00
Shrinkage Allowance	0.00	0.00	0.00	0.00	0.00
Delivery Charges Beyond FDZ	0.00	10.72	0.00	0.00	0.00
Entry Tax Percent	0.00%	0.00%	0.00%	0.00%	0.00%
Entry Tax Amout	0.00	0.00	0.00	0.00	0.00
Octroi at Depot	0.00	0.00	0.00	0.00	0.00
Toll Tax	0.00	0.00	0.00	0.00	0.00
Octroi at Destination	0.00	0.00	0.00	0.00	0.00
RPO Price	21603.85	21975.16	22439.23	21772.94	21816.42
CST Rate (%)	0.00%	0.00%	0.00%	0.00%	0.00%
CST Amount	0.00	0.00	0.00	0.00	0.00
Sales Tax Percent	20.00%	20.00%	34.40%	28.00%	20.00%
Sales Tax Amount	4320.77	4395.03	7719.09	6096.42	4363.28
Surcharge on Sales Tax%	0.00%	0.00%	0.00%	0.00%	0.00%
Surcharge on Sales AMT	0.00	0.00	0.00	0.00	0.00
Cess Advalorem-Rate	0.00	0.00	0.00	0.00	0.00
Cess Advalorem-Amount	0.00	0.00	0.00	0.00	0.00
Dealer Commission	613.00	613.00	613.00	613.00	613.00
RSP/KL	26537.62	26983.19	30771.32	28482.37	26792.71
RSP/LTR	**26.54**	**26.99**	**30.78**	**28.49**	**26.80**

Contd.

IX. 5 PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1.4.2002

Market	N. Delhi	Calcutta	Mumbai	Chennai	Kanpur
HIGH SPEED DIESEL OIL (Rs./KL)					
Storage Point Price	11440.00	11440.00	11440.00	11440.00	11040.00
State Surcharge	2.00	300.00	18.00	120.00	210.00
BMC Surcharge	0.00	0.00	299.00	0.00	0.00
Siding Charge	6.35	0.00	0.00	0.00	56.42
PL Charges	0.00	0.00	0.00	0.00	0.00
RLY/Ocean/Freight	102.68	21.93	0.00	0.00	221.32
RPO Surcharge	21.00	21.00	21.00	21.00	21.00
RPO Charge (Excisable)	0.27	0.27	0.27	0.27	0.27
Ass. Value Adj. Wagon Load.	0.00	0.00	0.00	0.00	17.35
Assesable Value Adj.	16.66	23.31	84.48	48.73	32.35
Assesable Value	11588.96	11806.51	11862.75	11630.00	11598.71
Excise Duty Rate (0%)	16.00%	16.00%	16.00%	16.00%	16.00%
Excise Duty Amount	1854.23	1889.04	1898.04	1860.80	1855.79
Sub Total	13443.19	13695.55	13760.79	13490.80	13454.50
Ass. Value Adj.	0.00	0.00	0.00	0.00	0.00
Red. to Arr. Contrl Price	0.27	0.27	0.27	0.27	17.62
RPO Charge (Total)	44.27	44.27	44.27	44.27	44.27
Spl. Excise Duty	1000.00	1000.00	1000.00	1000.00	1000.00
Sub Total	14487.19	14739.55	14804.79	14534.80	14481.15
Goods Tax	0.00	0.00	0.00	0.00	0.00
Road Bridging Charges	0.00	0.00	0.00	0.00	0.00
Shrinkage Allowance	0.00	0.00	0.00	0.00	0.00
Delivery Charges Beyond FDZ	0.00	10.72	0.00	0.00	0.00
Entry Tax Percent	0.00%	0.00%	0.00%	0.00%	0.00%
Entry Tax Amout	0.00	0.00	0.00	0.00	0.00
Octroi at Depot	0.00	0.00	0.00	0.00	0.00
Toll/Transit Tax	0.00	0.00	0.00	0.00	0.00
Octroi at Destination	0.00	0.00	0.00	0.00	0.00
RPO Price	14487.19	14750.27	14804.79	14534.80	14481.15
CST Rate (%)	0.00%	0.00%	0.00%	0.00%	0.00%
CST Amount	0.00	0.00	0.00	0.00	0.00
Sales Tax Percent	12.00%	12.55%	40.00%	22.00%	20.00%
Sales Tax Amount	1738.46	1851.16	5921.92	3197.66	2896.23
Surcharge on Sales Tax%	0.00%	0.00%	0.00%	0.00%	0.00%
Surcharge on Sales AMT	0.00	0.00	0.00	0.00	0.00
Cess Advalorem-rate	0.00	0.00	0.00	0.00	0.00
Cess Advalorem-Amount	0.00	0.00	0.00	0.00	0.00
Dealer Comission	365.00	365.00	365.00	365.00	365.00
RSP/KL	16590.66	16966.43	21091.71	18097.46	17742.38
RSP/LTR	**16.60**	**16.97**	**21.10**	**18.10**	**17.75**

Cont'd...

IX.5 PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1.4.2002

Market	N.Delhi	Calcutta	Mumbai	Chennai	Kanpur
	SUPERIOR KEROSENE OIL (Rs./KL)				
Storage Point Price	6860.00	6860.00	6860.00	6860.00	6860.00
STATE Surcharge	0.00	62.00	4.00	113.00	44.00
BMC Surcharge	0.00	0.00	62.00	0.00	0.00
Siding Charge	3.69	0.00	0.00	0.00	53.54
RLY/PL/Ocean/Freight	52.51	19.37	0.00	0.00	116.77
Ass. Value	6916.20	6941.37	6926.00	6973.00	7074.31
Excise Duty Rate	16.00%	16.00%	16.00%	16.00%	16.00%
Excise Duty Amount	1106.59	1110.62	1108.16	1115.68	1131.89
Sub Total	8022.79	8051.99	8034.16	8088.68	8206.20
Delivery Charges	0.00	0.00	0.00	0.00	0.00
Entry Tax Percent	0.00%	0.00%	0.00%	0.00%	0.00%
Entry Tax Amount	0.00%	0.00%	0.00%	0.00%	0.00%
Octroi at depot	0.00	0.00	0.00	0.00	0.00
CST Rate (%)	0.00	0.00	0.00	0.00	0.00
CST Amount	0.00	0.00	0.00	0.00	0.00
Sales Tax Percent	4.00%	4.55%	4.00%	4.00%	10.00%
Sales Tax Amount	320.91	366.37	321.37	300.51	820.62
Surcharge On Sales Tax%	0.00%	0.00%	10.00%	0.00%	0.00%
Surcharge on Sales Amt	0.00	0.00	32.14	0.00	0.00
Sub Total	8343.70	8418.36	8387.66	8389.19	9026.82
Cess/Toll Charges/Tot Rate	0.00	0.00	1.00%	0.00	0.00
Cess/Toll Charges/Tot Amt	0.00	0.00	83.88	0.00	0.00
Less State Govt Subsidy	0.00	0.00	0.00	-576.00	0.00
EX-MI/Depot Price/KL-Oilco	8343.70	8418.36	8471.54	7813.19	9026.82
Wholesales Margin	170.00	169.00	170.00	143.00	170.00
Transport Charges	284.25	203.30	211.00	52.25	110.00
Leakage and Other Expenses	0.00	0.00	0.00	0.00	104.79
Rounding Up	0.00	0.00	0.00	0.00	0.00
Wholesales Price/Kl	8797.95	8790.66	8852.54	8008.44	9411.61
Ratailer Margin	179.00	146.18	109.00	360.00	140.00
Retailer Transportation	0.00	205.18	0.00	30.00	40.00
Leakage and Other Expenses	0.00	130.00	49.74	0.00	0.00
Rounding Up	0.00	0.00	-2.94	0.00	0.00
Retail Selling Price/Kl	8976.95	9272.02	9008.34	8398.44	9591.61
RSP/LTR	**8.98**	**9.27**	**9.01**	**8.40**	**9.59**

Cont'd...

IX. 5(Concluded) PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS IN MAJOR CITIES AS ON 1.4.2002

	Delhi	Kolkata	Mumbai	Chennai	Kanpur
Liquefied Petroleum Gas (Domestic) (Rs./14.2 KG Cyl)					
Basic Price	169.43	169.43	169.43	169.43	169.43
State Surcharge	0.03	3.86	4.08	7.01	2.70
Freight Upto Bottling Plant	1.42	2.27	0.00	0.00	2.92
Assessabe Value	170.88	175.57	173.51	176.45	175.06
Excise Duty	27.34	28.09	27.76	28.23	28.01
Price at Bottling Plant	198.22	203.66	201.27	204.68	203.06
Freight/Local Delivery Charges	10.00	10.00	10.00	10.00	10.00
Octroi/Transit Tax	0.00	0.00	0.00	0.00	0.00
Price Including Octroi	208.22	213.66	211.27	214.68	213.06
Central Sales Tax/Sales Tax	16.66	36.32	16.90	17.17	21.31
Billable Rate	224.88	249.98	228.17	231.86	234.37
Sub Total	224.88	249.98	228.17	231.86	234.37
Price to Dealer (14.2kg/Cyl)	224.88	249.98	228.17	231.86	234.37
Distributor Commission	15.55	15.55	15.55	15.55	15.55
Resale Tax Amount	0.00	0.00	1.22	0.00	0.00
RSP for 14.2 Kg/Cyl	240.43	265.53	244.94	247.41	249.91
RSP/Cyl (Rounded)	240.45	265.55	244.95	247.40	249.90
Furnace Oil (Rs./Kl)					
Ex-Storage point Price		8860.00	8640.0	8780.00	
State Surcharge		105.00	191.60	305.00	
Notional Railway Freight		160.00	0.00	0.00	
Assessable Value		9125.00	8831.60	9085.00	
Excise Duty @16%		1460.00	1413.06	1453.60	
Total Inclusive of Excise Duty		10585.00	10244.66	10538.60	
Sales Tax		2117.00	1567.43	1686.18	
Surcharge on Sales Tax		0.00	0.00	0.00	
Total		12702.00	11812.09	12224.78	
Light Diesel Oil (Rs./Kl)					
Ex-Storage Point Price	10839.45	11090.00	11090.00	11090.00	11090.00
State Surchage	25.00	82.17	121.28	455.00	5.00
Notional Railway Freight	321.88	340.00	0.00	0.00	571.55
Assessable Value	11186.33	11512.17	11211.28	11545.00	11666.55
Excise Duty @16%	1789.81	1841.95	1793.80	1847.20	1866.65
Total Inclusive of Excise Duty	12976.14	13354.12	13005.08	13392.20	13533.20
Sales Tax	1557.14	1675.94	1989.78	2410.60	2706.64
Surcharge on Sales Tax	0.00	0.00	0.00	0.00	0.00
Total	**14533.28**	**15030.06**	**14994.86**	**15802.80**	**16239.84**

IX.6 TRENDS IN RETAIL SELLING PRICES OF SELECTED PETROLEUM PRODUCTS IN METROPOLITAN TOWNS IN INDIA

Prices as on	Mumbai	Calcutta	Delhi	Madras	Kanpur
		Motor Spirit (Rs./Litre)			
01.01.1975	3.26	3.27	3.27	3.19	3.35
08.06.1980	5.15	5.14	5.11	4.90	5.22
17.03.1985	7.34	7.16	7.00	7.39	7.16
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
01.04.1998	25.79	23.54	22.84	26.79	23.76
01.04.1999	28.25	24.56	24.01	27.99	26.06
03.04.2000	28.47	26.33	26.07	27.99	26.08
01.04.2001	31.73	29.03	28.75	30.38	28.94
1.4.2002	30.78	26.99	26.54	28.49	26.80
		High Speed Diesel Oil (Rs/Litre)			
01.01.1975	1.06	1.10	1.11	1.15	1.15
08.06.1980	2.21	2.25	2.28	2.24	2.34
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
01.04.1990	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
01.04.1996	7.84	7.24	6.99	7.80	7.68
01.04.1997	9.00	8.32	8.02	8.86	8.65
01.04.1998	11.43	10.55	10.25	11.30	10.85
01.04.1999	11.84	10.18	10.03	10.91	10.92
01.04.2000	16.91	14.20	14.56	15.24	15.17
01.04.2001	20.07	16.92	17.06	18.01	18.16
01.04.2002	21.10	16.97	16.60	18.10	17.75

Contd.

IX.6 (Concl.) TRENDS IN RETAIL SELLING PRICES OF SELECTED PETROLEUM PRODUCTS IN METROPOLITAN TOWNS IN INDIA

Prices as on	Mumbai	Kolkata	Delhi	Madras	Kanpur
		Superior Kerosene (Rs./Litre)			
01.01.1975	1.01	1.05	1.08	1.10	1.25
08.06.1980	1.39	1.49	1.54	1.55	1.59
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
01.04.1990	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
01.04.1998	2.55	3.05	2.56	2.80	2.79
01.04.1999	2.63	3.01	2.51	2.76	2.75
01.04.2000	5.37	5.84	5.55	5.64	5.95
01.04.2001	7.57	7.76	7.35	7.00	7.90
01.04.2002	9.01	9.27	8.98	8.40	9.59
		Liquified Petroleum Gas (Rs./Cylinder)			
	14.2Kg.cyl	15.Kg.cyl	15Kg.cyl	15Kg.cyl	15Kg.cyl
01.01.1975	22.10	27.79	27.36	23.91	27.61
13.08.1981	38.94	49.09	45.53	—	46.26
17.03.1985	49.95	56.34	51.35	50.74	54.89
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
01.04.1996	94.40	107.00	93.08	98.05	98.90
01.04.1997	118.60	136.65	119.95	124.10	126.25
01.04.1998	137.85	158.55	136.00	145.05	144.38
01.04.1999	147.85	170.00	146.00	155.35	154.95
01.04.2000	199.00	217.20	196.55	202.40	204.50
01.04.2001	225.20	245.65	222.25	228.65	231.20
01.04.2002	244.95	265.55	240.45	247.40	249.90

Note: w.e.f. 17.3.1985 the prices shown for the LPG cylinder refers to 14.2 Kg for all the metropolitan cities in the Country.

IX. 7 RATES OF DEALER'S 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#			refills p.m.	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		Upto 3000	Above 3000
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17.3.1985	146	108	95	76	-	-	83	62	44	38	-	-	-	-	-
20.3.1990	250	179	160	138	-	-	135	92	42	66	-	-	-	-	-
15.10.1990	279	204	182	155	-	-	145	101	77	70	-	-	-	-	-
17.5.1991	279	204	182	155	-	-	145	101	77	70	-	-	5.70	-	-
25.7.1991	311	233	206	172	-	-	145	101	77	70	-	-	5.70	-	-
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@@
2.21994*	-	-	-	-	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
1.4.1997*	-	-	-	-	389	239	-	-	-	-	201	94	-	8.30	7.40
6.11.1997*	-	-	-	-	409	409	-	-	-	-	222	168	-	10.50	10.50
1.4.1998*	-	-	-	-	411	411	-	-	-	-	223	169	-	10.80	10.80
1.4.1999*	-	-	-	-	413	413	-	-	-	-	224	170	-	11.10	11.10
6.10.1999*	-	-	-	-	413	413	-	-	-	-	238	184	-	11.10	11.10
5.1.2000*	-	-	-	-	462	462	-	-	-	-	271	271	-	13.83	13.83
1.4.2000*	-	-	-	-	462	462	-	-	-	-	271	271	-	14.28	14.28
1.10.2000*	-	-	-	-	478	478	-	-	-	-	277	277	-	14.57	14.57
23.11.2000*	-	-	-	-	478	478	-	-	-	-	277	277	-	14.38	14.38
01.12.2000*	-	-	-	-	478	478	-	-	-	-	277	277	-	14.53	14.53
10.11.2001**	-	-	-	-	613	613	-	-	-	-	365	365	-	15.55	15.55

Exclusive of demand draft charges.

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

Sales per annum (Combined MS/HSDO sales)	MS (Rs./Kl)	HSDO (Rs./Kl)
up to 360	80	50
361 to 720	35	10
721 and above	25	10

@ upto 2500 Cyl per month

@@ Above 2500 Refills per month

* For dealers on DD an amount of Rs. 40/Kl for MS and Rs. 16/Kl for HSD shall be paid additionally

** For dealers on DD an amount of Rs. 58/Kl for MS and Rs. 34/Kl for HSD shall be paid additionally
For dealers on pay order/bank cheque an amount of Rs. 29/Kl for MS and Rs. 17/Kl for HSD shall be paid additionally.

X. EXCISE/CUSTOM DUTIES AND SALES TAX

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

(Rs. Crores)

PRODUCTS	1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
	ACTUAL							(RE)	(BE)
A. EXCISE DUTIES									
1. Motor Spirit	1202	1631	2117	2942	4442	5018	5426	7979	12305
2. Kerosene Oil	255	258	647	227	238	249	725	883	1480
3. Refined Diesel Oil	693	1155	1962	2052	3139	6769	8147	11523	13990
4. Diesel Oil (NES)	35	80	123	145	154	1233	1104	884	688
5. Furnace Oil	49	146	289	544	306	616	981	885	1980
6. Pol. Products (NOS)	421	733	881	1900	2202	2715	3378	2374	3126
7. Petroleum Gases	66	276	382	397	379	359	1296	1183	2298
8. Cess on crude oil	2757	2880	2675	2740	2634	3243	3606	3134	5500
TOTAL (A)	**5478**	**7159**	**9076**	**10947**	**13494**	**20202**	**24663**	**28845**	**41367**
B. CUSTOM DUTIES									
1. Crude Petroleum	3145	4052	5740	4867	3230	6257	7794	5772	6000
2. Petroleum Products	920	4401	6677	5159	4789	6203	3455	1760	1530
TOTAL (B)	**4065**	**8453**	**12417**	**10026**	**8019**	**12460**	**11249**	**7532**	**7530**
GRAND TOTAL (A+B)	**9543**	**15612**	**21493**	**20973**	**21513**	**32662**	**35912**	**36377**	**48897**

Figures rounded to nearest crores
RE: Revised Estimates

Source: Ministry of Finance
BE: Budget Estimates

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

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 Excises on POL as % of Total Central Excise
1	2	3	4	5	6	7
1960-1	15204	416	101	2.7	0.7	24.3
1965-66	23752	898	261	3.8	1.1	29.1
1970-71	38968	1759	608	4.5	1.6	34.6
1975-76	69005	3845	1040	5.6	1.5	27.1
1980-81	118236	6500	1216	5.5	1.0	18.7
198586	221409	13006	2718	5.9	1.2	20.9
1990-91	450145	24451	5478	5.4	1.2	22.4
1991-92	514607	28121	5262	5.5	1.0	18.7
1992-93	587064	30651	5042	5.2	0.9	16.4
1993-94	685912	31872	5310	4.6	0.8	16.7
1994-95	805981	37347	6696	4.6	0.8	17.9
1995-96	941861	40187	7159	4.3	0.8	17.8
1996-97	1093961	45008	9076	4.1	0.8	20.2
1997-98	1224946	47962	10947	3.9	0.9	22.8
1998-99	1415093	53246	13494	3.8	1.0	25.3
1999-00	1564142	61902	20202	4.1	1.3	32.6
2000-01	1702454	68526	24663	4.0	1.4	36.0
2001-02	1864292	72555	28845	3.9	1.5	39.8

Source:I) Government of India's Economic Survey for N.N.P.
II) Budget Papers of Central Government RE: Revised Estimates
III) National Accounts Statistics. BE: Budget Estimates

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

Year	Consumption of POL Products (Excl. R.B.F.) (000' MTS)	Central Excise Duty realisation (Rs. Crores)	Customs Duties realisation (Rs. Crores)	Total Central Excise & Customs duties (Rs. crores)	Composite Unit Incidence of Excise & Custom duties (Rs.)
1	2	3	4	5	6
1960-61	7985	101	23	124	155.29
1965-66	11917	281	83	344	288.66
1970-71	17912	608	30	638	356.19
1975-76	22447	1040	115	1155	514.55
1980-81	30896	1604	354	1570	598.20
1985-86	40872	3969	1050	3768	921.90
1990-91	55035	5478	4065	9543	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	67513	6996	6209	12906	1911.63
1995-96	74831	7159	8453	15612	2086.30
1996-97	79168	9076	12417	21493	2714.86
1997-98	84290	10947	10026	20973	2488.20
1998-99	90562	13494	8019	21513	2375.50
1999-00	97086	20202	12460	32662	3364.23
2000-01	100074	24663	11249	35912	3588.54
20001-02	98554	28845	7532	36377	3691.07

P. Provisional

X. 4 ROYALTY AND OIL DEVELOPMENT CESS PAID BY OIL COMPANIES ON PRODUCTION OF CRUDE OIL AND NATURAL GAS SINCE 1975-76 to 2001-02

(Rs. Lakhs)

Year	Royalty Paid on Crude Oil						Royalty Paid on Natural Gas					Oil Development Cess
	Western Region	Eastern Region	Southern Region	Total On Shore	B. High/ KG Off shore	Total	Western Region	Eastern Region	Southern Region	B.High/ KG Off shore	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13
1975-76	615	645	-	1260	-	1260	43	26	-	-	69	3081
1980-81	1578	531	-	2109	1997	4106	168	36	-	50	253	6040
1985-86	18275	12433	-	25708	12155	37863	242	96	-	1905	2243	86629
1990-91	39424	26074	1291	66789	136037	202826	1283	421	68	12038	18810	278197
1991-92	17723	19385	964	38072	52885	90957	1910	428	216	18859	21418	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	862	19585	23906	217538
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	34897	26305	2400	63602	105549	169151	3661	403	1262	22004	27330	266747
1997-98	34210	27951	2531	64652	115390	180042	4839	675	2065	33956	41535	283757
1998-99	33256	27972	3033	64261	106739	171000	4831	982	2301	35667	43781	275385
1999-00	40551	33452	3632	77635	127260	204895	6036	1784	2785	44117	54722	271633
2000-01	46416	39577	5431	91424	135789	227213	5472	1350	3282	50732	60836	272760
2001-02*	54229	41574	14529	110332	138261	248593	7383	2932	4354	51215	65884	287845

*Provisional

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 fo 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 1.4.90 arising on account of revision in royalty rate from 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)

Products	Selling Unit	w.e.f. 8.6.80	w.e.f. 13.1.81	w.e.f. 11.7.81	w.e.f. 15.2.83	w.e.f. 1.4.83	w.e.f. 1.8.83	w.e.f. 1.4.84 up to 1.3.88	w.e.f. 1.3.88 up 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
1. Av. gas 100/130	KL	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	2435.85	NA
3. Av. Gas 73	KL	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	2327.50	2338.82	2668.87
5. M.S. 93	KL	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	333.52@	333.52	333.52	333.52	333.52	333.52	333.52	352.07	369.83	985.23
7. S.K.O.	KL	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	330.00@	330.00	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	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	*	*	*
11. F.O. (Non-Ferts Use)	KL	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	115.50	175.00	412.50
13. Bitumen (Packed)	MT	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	273.50	285.00	530.92
15. LPG (Indust) Bulk	MT	262.50	262.50	262.50	262.50	262.50	262.50	262.50	273.00	285.00	1160.18
16. Naphtha*- (Fert, Use)	MT	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	*	*	26.25	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 supplly of FO/Naphtha tofertilizers 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. 1.3.2002

(Rs./Selling Unit)

Products	Selling Unit	Ex-storage prices Without Excise duty	Rate of duty %
1	2	3	4
LNG	—	—	16%
NGL	—	—	16%
MS-87	KL	18999.01	16@
MS-93	KL	21839.01	16
LSHS	MT	8410.00	16
HS DO	KL	11934.60	16
HSD (0.05% Sulphur)	KL	12334.17	16
FO	KL	7850.00	16
SKO (Domestic)	KL	6110.00	8
SKO-Industrial	KL	6518.63	8
LDO	KL	12190.00	16
ATF (Domestic)	KL	14759.32	16
Naphtha-fert $	MT	12780.00	16
Naphtha-other $	MT	13350.00	16
LPG-Packed (non-Domestic)	MT	12426.76	16

@ w.e.f 1.3.2002 SPL addl. Excise duty @ Rs. 6/- Litre
Plus addl. duty of excise @ Rs 1/- on MS.

X. 7 SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERNT STATES AS ON 1.4.2002

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

@: These rates are inclusive of other levies recoverable from the customers as shown below
DP: Duty Paid

TAXES APPLICABLE IN ADDITION TO THE SALESTAX AS ON 1.4.2002

ANDHRA PRADESH: Turnover tax @ 2% on petroleum products except MS, HSD, ATF, FO, engine oil, lube oil, greases and brake fluids. This cannot be recovered from the customers.

ASSAM: 10% Addl. Tax on Sales Tax is payable. This is recoverable from the customers.

BIHAR: (1) 1% Addl. Tax on gross turnover is payable. This is recoverable from customers.
(2) 10% Surcharge on Sales Tax is payable, but not recoverable from the customers.

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. 2 Crores but less than Rs. 7 Crores	15%
(b) On gross Turnover above Rs. 7 Crores but less than Rs. 15 Crores	20%
(c) On gross turnover above Rs. 15 Crores	25%

GUJARAT: Additional Tax @ 20% on tax on (MST products) i.e. MS, HSD, AV. Spirit, Av. Gas ATF and 10% on GST products. This is recoverable from the customers. Turnover Tax: @ 2% on taxable turnover on MST products excluding exempted sales. This is not recoverable from customers and Turnover Tax @ 10% on Taxable turnover on GST products. This is not recoverable from customers.

CESS: (In lieu of octroi) @ 2% on MS and @ 3% on HSD.

X. 7 (Contd.) SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERNT STATES AS ON 1.4.2002

S. No.	Products	Himachal Pradesh	J&K	Karnataka	Kerala	Madhya Pradesh	Maharshtra	Manipur
		10	11	12	13	14	15	16
A. CRUDE & GAS								
1.	Crude Oil	4%	4%	4%	4%	4%	4%	4%
2.	Natural Gas	8%	20%	12%	24%	8%	13%	
B. PETROLEUM PRODUCTS								
3.	Aviation Spirit	20%DP	20%DP	25%DP	34%DP	25% DP	—	20%DP
4.	Aviation Turbine Fuel	20%DP	20%DP	25%DP	34%DP	25%DP	Bonded 30% Duty Paid 25%	20%DP
5.	Motor Spirit	20%	20%	25%	28%	25%	33.78%	20%
6.	H.S.D.	12%	12%	17.5%	24%	25%	38.14%	12%
7.	L.D.O.	10%	8%	17.5%	41%	12%	13%	12%
8.	M.L.O.	8%	20%	15%	30%	8%	13%	—
9.	S.K.O.	8%	4%	4%(PDS)/ 15%*	12%	Exemp/2%*	4%	4%
10.	I.K.O.	—	—	—	—	—	20%	—
11.	F.O.	8%	20%	15%	30%	8%	13%	20%
12.	M.T.O.	8%	20%	15%	30%	8%	13%	20%
13.	Lubes	8%	20%	15%	24%	12%	13%	10%
14.	Greases	8%	20%	15%	24%	12%	13%	10%
15.	Petroleum Naphtha	12%	12%	12%	22%	8%	13%	12%
16.	Bitumen/Asphalt	8%	20%	15%	30%	8%	13%	20%
17.	Petroleum Coke	4%	4%	4%	4%	4%	4%	4%
18.	Indane (LPG)	8%	12%	12%	16%	12%	8%/13%*	8%
19.	Transformer Oil	8%	20%	15%	24%	12%	13%	20%
20.	H.B. Fluid	8%	20%	15%	24%	8%	13%	—
21.	L.S.H.S.	8%	20%	15%	30%	8%	13%	20%

*Household/Other Use DP: Duty Paid

TAXES APPLICABLE IN ADDITION TO THE SALESTAX AS ON 1.4.2002

JAMMU & KASHMIR	Surcharge @ 5% of Sales Tax is payable. This does not apply to products falling under MST. (i.e. MS, HSD). This is recoverable from the customers.
KARNATAKA	Re-sale tax @ 1.5% on second and subsequent sales on all products except MS, HSD, LPG and SKO.
MADHYA PRADESH	Surcharge: @ 15% on Commercial Tax recoverable from the customers.
MAHARASHTRA	1. Turnover Tax: @ 1%, on Taxable Turnover on all products except on Petrol/Diesel/ ATF, V. Gas, LPG (Domestic). This is recoverable from the customers. 2. Surcharge: @ 10% on Sales Tax on all products except on Petrol Diesel/ATF, AV. Gas LPG (domestic). This is recoverable from the customers.
KERALA	Additional tax on sales tax @ 15% on all products except on MS, HSD and LPG.

X. 7 (Contd.\) SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.2002

S. No..	Products	Nagaland	Orissa	Punjab	Rajasthan Tamil Nadu
	17	18	19	20	21
A. CRUDE OIL & GAS					
1. Crude Oil	4%	4%	4%	4%	4%
2. Natural Gas	12%	—	8%	10%	10%
B. PETROLEUM PRODUCTS					
3. Aviation Spirit	—	20%DP	20%DP	23%DP	24% DP
4. Aviation Turbine Fuel	15%DP	20%DP	20%DP	23%DP	24%DP
5. Motor Spirit	24%	20%	20%	23%	24%
6. H.S.D.	15%	20%	8%	16%	22%
7. L.D.O.	15%	20%	20%	16%	18%
8. M.L.O.	—	12%	8%	10%	16%
9. S.K.O	5%/15%*	0%(PDS)/4%	20%	8%	4%
10. I.K.O.	—	—	—	—	—
11. F.O.	—	4%	8%	10%	16%
12. M.T.O.	12%	12%	8%	16%	16%
13. Lubes	20%	12%	8%	12%	16%
14. Greases	20%	12%	8%	12%	16%
15. Petroleum Naphtha	12%	12%	12%	12%	16%
16. Bitumen/Asphalt	12%	8%	20%	12%	11%
17. Petroleum Coke	—	4%	4%	4%	4%
18. Indane (LPG)	12%	12%	8%	12%	8%
19. Transformer Oil	12%	12%	6%	10%	16%
20. H.B. Fluid	—	12%	8%	10%	12%
21. L.S.H.S.	12%	12%	20%	10%	16%

DP: Duty Paid * Household/Other use

TAXES APPLICABLE IN ADDITION TO THE SALES TAX AS ON 1.4.2002

ORISSA — Surcharge: @ 10% of Sales Tax is payable. This is recoverable from the customers.

PUNJAB — 1. Social Security Cess: @ 10% of the Sales Tax is payable. This is recoverable from the customers.

2. CESS: @ 1% on Advolerem basis for MS.

RAJASTHAN — Surcharge: @ 15% of the Sales Tax is payable. This is recoverable from the customers. Turnover Tax: @ 0.25% on Turnover is payable on all products. (Dealers of MS & HSD exempted on the condition that they have to pay @0.50% on TOT & 15% S/C on TOT.

TAMIL NADU — Additional Tax @ the following rate is payable on the Taxable Turnover. This is not recoverable from the customers.

On Taxable Turnover	
below Rs. 10 lacs	Nil
between Rs. 10 to 40 lacs	1.25%
between Rs. 40 lacs to to 1 crs	1.50%
between Rs. 1 crs to 5 crs.	2.00%
between Rs. 5 crs to 10 crs.	2.25%
between Rs. 10 crs to 300 crs.	2.50%
above Rs. 300 crs.	3.00%

X. 7 (Concluded) SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS IN DIFFERENT STATES AS ON 1.4.2002

S. No.. Products	Jharkhand	Sikkim	Tripura	Uttar Pradesh	West Bengal	Chandigarh	Delhi
22	23	24	25	26	27	28	
A. CRUDE OIL & GAS							
1. Crude Oil	4%	-	4%	4%	4%	4%	4%
2. Natural Gas	-	-	12%	20%	-	8%	20%
B. PETROLEUM PRODUCTS							
3. Aviation Spirit	25%DP	20%DP	20%DP	20%DP	20%DP	20%DP	20%DP
4. Aviation Turbine Fuel	25% DP	20%DP	20%DP	20%DP	25%DP	20%DP	20%DP
5. Motor Spirit	20%	20%	20%	20%	20%	20%	20%
6. H.S.D.	15%	10%	12%	20%	12.55	11%	12%
7. L.D.O.	15%	10%	12%	20%	12.55%	8%	12%
8. M.L.O.	9%	-	-	20%	10%	8%	12%
9. S.K.O.	6%	12%	5%	10%	4.55%PDS	8%	4%
10. I.K.O.	-	-	-	-	7.5%	-	12%
11. F.O.	8%	20%	5%	20%	20%	8%	20%
12. M.T.O.	9%	8%	5%	20%	4%	8%	20%
13. Lubes	16%	12%	12%	20%	15%	8%	12%
14. Greases	16%	12%	12%	20%	15%	8%	12%
15. Petroleum Naphtha	12%	12%	5%	20%	12%	8%	20%
16. Bitumen/Asphalt	9%	8%	5%	20%	10%	8%	20%
17. Petroleum Coke	4%	4%	4%	4%	4%	4%	4%
18. Indance (LPG)	9%	12%	12%	10%	17%	8%	8%
19. Transformer Oil	-	-	5%	10%	10%	8%	8%
20. H.B. Fluid	16%	12%	12%	10%	15%	8%	20%
21. L.S.H.S.	9%	8%	5%	20%	10%	8%	20%

DP: Duty Paid

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

TAXES APPLICABLE IN ADDITION ON THE SALES TAX AS ON 1.4.2002

TRIPURA	Additional tax @ 0.5% on taxable turnover payable, This is not recoverable from the customers.
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.
WEST BENGAL	Additional tax @ 20% on Tax (ST/SC/Addl. tax) on MS, HSD, LDO, ATF is payable. This is not recoverable from the customers.
CHANDIGARH	Surcharge @ 10% on Sales Tax is payable on all the products. This is recoverable from the customers.
	Resale tax @ 0.5% on resale of petroleum products except MS, HSD, ATF, Avgas, SKO, LDo, LPG, FO and petroleum coke. Recoverable from customers, Surcharge @ 10% on tax on Petroleum products including lubes/greases but excluding MS, ATF, Avgas, SKO, HSD, LDO, FO, LPG and petroleum coke. This is recovereable from the customers.

X. 8 SALES TAX PAYMENTS (INCLUSIVE OF MST AND CST) ON CRUDE OIL CONDENSATES, NATURAL GAS AND PETROLEUM PRODUCTS MADE BY THE OIL COMPANIES TO STATE/UT GOVERNMENTS DURING THE YEARS 1992-93 to 2001-02

(Rs./Lakhs)

STATE/UTs	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
1. CRUDE OIL										
Rajasthan	0	0	0	0	0	0	0	0	0	1
Assam	5017	6205	6122	5976	6218	6590	6618	8896	10634	10741
Gujarat	6542	7349	7675	7826	8333	8170	7933	10851	12574	13607
Arunachal Pradesh	50	69	41	23	32	29	27	34	614	60
Nagaland	65	72	14	0	0	0	0	0	0	0
Andhra Pradesh	0	0	0	0	0	53	86	6	103	4
Maharashtra*	16368	15207	21312	23441	22814	22486	20311	25765	29321	27925
Tamil Nadu	365	464	492	470	453	447	504	718	957	1009
Total(1)	**28407**	**29366**	**35656**	**37736**	**37850**	**37775**	**35479**	**46270**	**54203**	**53347**
2. NATURAL GAS										
Assam	520	497	580	722	1065	1257	1569	2497	3036	2595
Gujarat	17205	8701	5931	7924	26642	31638	35010	38863	44568	44547
Maharashtra (Bombay High)	6505	6602	8775	4998	6776	7264	11853	9509	10772	7977
Rajasthan	0	0	0	8	7	1260	107	148	157	184
Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0
Tamil Nadu	38	40	28	39	101	129	97	286	390	744
Tripura	93	82	78	113	127	207	410	629	760	789
Uttar Pradesh	0	0	0	0	5654	7080	8376	10908	12334	12598
Haryana	0	0	0	0	0	350	0	0	0	0
Madhya Pradesh	0	0	0	0	2565	2426	7436	6180	6972	5824
Andhra Pradesh	1097	1368	1374	1627	2143	5316	5180	6762	8022	9895
TOTAL (2)	**25458**	**17290**	**16766**	**15431**	**45080**	**56927**	**70038**	**75782**	**87011**	**85153**
3. POL. PRODUCTS										
Andhra Pradesh	41956	51981	61688	73029	88786	110110	109847	158452	194146	151883
Assam	5292	5581	7030	8150	13011	11866	14801	19298	24568	25714
Arunachal Pradesh	0	0	0	0	0	2	0	0	190	426
Bihar	18258	19966	22818	25181	29497	36503	33775	57416	61684	45278
Chhattisgarh	0	0	0	0	0	0	0	0	6763	16673
Gujarat	62218	71876	88738	97801	118159	141668	149204	176193	203068	237604
Haryana	6874	8339	9488	10402	18469	23906	26202	41750	71515	63685
Himachal Pradesh	418	489	496	614	806	876	1379	4155	7625	8031
Jammu & Kashmir	1261	1564	1742	2305	2568	3464	4098	7009	11153	9869
Jharkhand	0	0	0	0	0	0	0	0	10988	19460
Karnataka	35426	44452	49346	60135	77274	98126	94173	116533	140413	125237
Kerala	39708	41540	45693	56791	70780	83885	89928	86602	134010	103372
Madhya Pradesh	20824	24364	31365	36178	42813	62255	69222	76902	86495	65876
Mahrashtra	83192	92755	116384	128425	152663	184845	176887	285395	386015	278283
Manipur	338	452	463	464	592	535	523	888	1362	1090
Meghalaya	1	1	6	110	277	319	515	796	1380	1093
Mizoram	95	108	113	134	177	197	126	250	339	499
Nagaland	60	99	147	155	222	295	182	769	907	1358
Orissa	6553	8272	10003	11802	14974	18456	22283	24359	34861	27587
Punjab	9221	10487	10834	13845	17263	19505	20259	43865	76277	64631
Rajasthan	22033	24963	30236	36759	44588	49755	64911	80114	101883	88392
Tamil Nadu	61016	73144	80939	93275	117578	134604	148699	206292	236552	188827
Tripura	336	321	354	391	476	599	636	759	1356	1981
Uttar Pradesh	40387	46152	55540	66992	79487	94489	105988	152489	196708	167481
Uttaranchal	0	0	0	0	0	0	0	0	4721	12284
West Bengal	29452	34294	39183	39132	47867	56217	62270	74411	95276	77600
Goa	4994	6746	8023	8187	10137	12256	12338	19026	21944	14999
Sikkim	0	37	57	53	80	107	111	281	613	728
Union Territories										
Daman & Diu	0	0	13	18	29	31	25	38	119	50
Chandigarh	79	106	130	147	186	171	176	482	1732	2221
Delhi	10194	12667	15248	23407	28964	35828	34697	53797	81164	67760
Dadra & Nagar Havli	0	0	0	0	0	2	1	3	5	5
Pondicherry/Mane	6	16	105	180	221	228	208	237	412	478
Total(3)	**500192**	**580772**	**686182**	**794062**	**977944**	**1181100**	**1243464**	**1688561**	**2196244**	**1870455**
Grand Total(1+2+3)	**554057**	**627428**	**738604**	**847229**	**1060874**	**1275802**	**1348981**	**1810613**	**2337458**	**2008955**

*Central Government

Source: Oil Companies

XI. TRANSPORTATION

XI. 1 TONNAGE OF INDIAN TANKERS FLEET 1975 TO 2002

(DWT in '000' MTs)

Year*	Coastal oil Tanker				Total		Offshore		Specialised		Total Offshore		Overseas								Oversease		Total All	
	Product Carriers		Crude Oil Carriers		Coastal Oil Tanker		Supply Vessels		Vessels for Offshore		Supply Vessls & 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 Tanker	No. of	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
1980	—	—	—	—	10	158.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38	3335.3	48	3493.8
1985	—	—	—	—	18	300.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	3807.0	66	4113.1
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	601.9	—	—	56	3713.2	158	4121.2
1991	14	186.1	2	88.2	16	268.3	63	75.9	31	70.7	94	146.6	9	990.5	23	2206.4	25	601.5	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
1998	9	129.8	2	82.2	11	212.0	69	80.8	25	56.7	94	137.5	3	312.0	31	3212.5	37	1280.4	5	99.4	76	4904.3	181	5253.8
1999	10	122.2	2	82.2	12	204.4	69	80.8	26	56.7	95	137.5	3	312.0	31	3212.5	40	1451.3	6	138.1	80	5113.9	187	5455.8
2000	11	132.0	2	82.2	13	214.2	68	81.2	27	57.2	95	138.4	3	312.0	35	3709.3	43	1573.3	6	138.1	87	5732.7	195	6085.3
2001**	10	83.2	2	82.2	12	165.4	69	85.4	27	59.2	96	144.6	4	355.1	34	3455.7	45	1656.5	6	138.1	89	5605.4	197	5915.4
2002	12	90.1	2	82.2	14	172.3	70	85.6	28	59.2	98	144.8	3	231.6	34	3474.3	45	1642.3	6	138.1	88	5486.3	200	5803.4

*As on 31st December upto 1988 and thereafter 31st March of each year.
Source: Directorate General of Shipping, Mumbai.
DWT=Dead Weight Tonnage

XI. 2 INDIAN TONNAGE AS ON 31.3.2002

(Tonnes)

	Owner of the Ship	Gross Registered Tonnage	Dead Weight Tonnage
	COASTAL TRADE		
	TANKERS (Product Carriers)		
A.	M/s Foods, Fats & Fertilisers	396	596
B.	M/s Essar Shipping Ltd., Mumbai	17237	30465
C.	M/s Reliance Industries Ltd.	14960	23497
D.	M/s ICICI Ltd.	4412	6618
E.	M/s Jaisu Shipping (P) Ltd.	1873	2808
F.	M/s Associated Maritime Pvt. Ltd.	1090	2052
G.	M/s Hede Ferrominas (P) Ltd.	493	872
H.	M/s Amar Ship Management	3391	6535
I.	M/s Mercator Lines	11040	16207
J.	M/s Viking Lighterage & Cargo Handlers P. Ltd.	306	415
	Total	**55198**	**90065**
	TANKERS (Crude Oil Carriers)		
A.	The Shipping Corpn. of India Ltd., Mumbai	54943	82249
	Total	**54943**	**82249**
	OFFSHORE SUPPLY VESSELS		
A.	M/s Garware Shipping Corpn. Ltd., Mumbai	4405	5300
B.	The Great Eastern Shipping Co. Ltd., Mumbai	12311	14014
C.	M/s Essar Shipping Ltd., Mumbai	3939	5253
D.	M/s VNS Offshore Services Co., Mumbai	487	737
E.	M/s Hede Ferrominas Pvt. Ltd., Goa	628	747
F.	The Shipping Corpn. of India Ltd. Mumbai	13100	17904
G.	Oil & Natural Gas Commission, Mumbai	37089	40138
H.	Admn. of Union Territory of Lakshadweep	738	960
I.	Gal Offshore Shipping Co.	640	0
J.	M/s Seaspan Shipping	157	126
K.	M/s Dolphin Offshore	363	247
L.	M/s Seatrans Shipping	69	0
M.	M/s RSOS Offshore, Kakinada	189	125
	Total	**74115**	**85551**
	SPECIALISED VESSELS FOR OFFSHORE SERVICES		
A.	M/s Essar Shipping Ltd. Mumbai	4485	2970
B.	M/s South East Asia Marine Engg. & Construction Ltd.	11211	5498
C.	M/s Oil & Natural Gas Commission, Mumbai	51729	42220
D.	M/s Raj Shipping	715	1469
E.	M/s Samson Maritime	1493	670
F.	M/s Elcome Surveys	392	469
G.	M/s Bombay Offshore Supplies & Services	491	407
H.	M/s South India Corpn. (Agencies) Ltd.	490	860
I.	M/s Jaisu Shipping Co.(P) Ltd.	99	99
J.	Director General of Lighthouses & Lightships	3357	1730
K.	The Geological Survey of India	2942	2013
L.	The Council of Scientific & Industrial Research	2661	800
M.	Department of Ocean Development	188	0
	Total	**80253**	**59205**

Contd...

XI. 2 (Concluded) INDIAN TONNAGE AS ON 31.3.2002

(Tonnes)

	Owner of the Ship	Gross Registered Tonnage	Dead Weight Tonnage
	OVERSEAS (ORE OIL BULK CARRIERS)		
A.	The Shipping Corpn. of India Ltd., Mumbai	94673	166544
B.	M/s Essar Shipping Ltd., Mumbai	38831	65075
	Total	**133504**	**231619**
	OIL TANKERS (CRUDE CARRIERS)		
A.	The Shipping Corpn. of India Ltd., Mumbai	1238044	2244504
B.	M/s India Steamship Co. Ltd., Calcutta	40614	60300
C.	The Great Eastern Shipping Co. Ltd.	137084	250390
D.	M/s Essar Shipping Ltd., Mumbai	480010	919080
	Total	**1895752**	**3474274**
	OIL TANKERS (PRODUCTS CARRIERS)		
A.	The Shipping Corpn. of India Ltd., Mumbai	275469	441898
B.	The Great Eastern Shipping Co. Ltd.	424237	703636
C.	M/s Varun Shipping Co. Ltd.	59016	97241
D.	M/s Essar Shipping Ltd., Mumbai	24634	39206
E.	M/s Century Shipping, Mumbai	16899	29990
F.	M/s Sanmar Shipping Corporation	56034	101200
G.	M/s Infrastructure Leasing & Financial Services Ltd.	29864	48532
H.	M/s ASM Shipping	18101	30990
I.	M/s Pratibha Shipping Ltd.	61867	107582
J.	M/s Tarun Shipping	4462	7334
K.	M/s Mercator Lines	19868	34730
	Total	**990451**	**1642339**
	LPG CARRIERS		
A.	The Shipping Corpn. of India Ltd., Mumbai	35556	35202
B.	M/s Varun Shipping Co. Ltd.	61874	74520
C.	The Great Eastern Shipping Co. Ltd.	21308	28400
	Total	**118738**	**138122**

Source: Directorate General of Shipping, Mumbai

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
Kolkata/Haldia	1969-70	6.89	1.53	22.5
	1979-80	8.56	4.58	53.5
	1989-90	14.45	6.44	44.6
	1990-91	15.24	7.26	47.6
	1995-96	21.52	10.74	40.0
	1996-97	23.12	10.98	47.5
	1997-98	28.16	14.34	50.9
	1998-99	29.38	15.75	53.6
	1999-00	31.03	16.47	53.1
	2000-01	30.00	14.24	47.5
	2001-02*	30.39	13.95	45.9
Mumbai	1969-70	15.04	8.60	57.2
	1979-80	16.57	7.84	47.3
	1989-90	28.55	18.58	65.1
	1990-91	29.79	19.89	66.8
	1995-96	34.05	30.15	59.2
	1996-97	33.73	18.71	55.5
	1997-98	32.10	16.73	52.1
	1998-99	30.97	16.78	54.2
	1999-00	30.41	16.79	55.2
	2000-01	27.06	15.64	57.8
	2001-02*	26.43	15.71	59.4
Chennai	1969-70	6.44	2.24	34.8
	1979-80	9.99	3.73	37.3
	1989-90	23.94	9.72	40.6
	1990-91	24.52	9.83	40.1
	1995-96	30.72	11.57	37.7
	1996-97	31.85	12.45	39.1
	1997-98	35.53	11.59	32.6
	1998-99	35.20	10.57	30.0
	1999-00	37.44	10.05	26.8
	2000-01	41.22	8.90	21.6
	2001-02*	36.12	8.51	23.6
Kochi	1969-70	4.79	3.56	74.3
	1979-80	5.47	3.87	70.8
	1989-90	7.13	5.59	78.4
	1990-91	7.28	5.80	79.7
	1995-96	11.50	9.36	81.4
	1996-97	11.74	9.23	78.6
	1997-98	12.17	9.77	80.3
	1998-99	12.68	9.45	74.5
	1999-00	12.80	9.95	77.7
	2000-01	13.12	9.67	73.7
	2001-02*	12.06	8.59	71.2

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
Kandla	1969-70	2.11	0.98	46.4
	1979-80	7.27	5.45	75.0
	1989-90	18.93	14.36	75.9
	1990-91	19.69	15.06	76.5
	1995-96	30.34	22.34	73.6
	1996-97	33.73	25.06	74.3
	1997-98	38.90	29.02	74.6
	1998-99	40.64	30.47	75.0
	1999-00	46.30	34.61	74.8
	2000-01	36.74	25.09	68.3
	2001-02*	37.73	22.71	60.2
J.N.P.T.	1989-90	0.70	—	—
	1990-91	2.03	—	—
	1995-96	6.87	—	—
	1996-97	8.07	—	—
	1997-98	8.90	0.68	7.6
	1998-99	11.72	1.17	10.0
	1999-00	14.98	1.41	9.4
	2000-01	18.58	1.81	9.7
	2001-02*	22.52	1.75	7.8
Visakhapatnam	1969-70	8.30	1.94	23.4
	1979-80	10.23	1.94	19.0
	1989-90	21.12	6.83	32.3
	1990-91	19.42	5.60	28.8
	1995-96	32.82	12.54	38.2
	1996-97	34.50	13.38	38.8
	1997-98	36.01	12.12	33.7
	1998-99	35.65	12.80	35.9
	1999-00	39.51	15.29	38.7
	2000-01	44.69	18.34	41.0
	2001-02*	44.34	18.58	41.9
Mormugao	1969-70	9.03	0.15	1.1
	1979-80	14.80	0.73	4.9
	1989-90	14.17	1.04	7.3
	1990-91	14.91	1.37	9.2
	1995-96	18.10	1.91	10.6
	1996-97	17.31	1.23	7.1
	1997-98	21.18	1.13	5.3
	1998-99	18.20	1.05	5.8
	1999-00	18.23	1.14	6.3
	2000-01	19.63	1.09	5.6
	2001-02*	22.93	1.15	5.0

Contd.....

XI. 3 (Concluded) 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
Paradip	1969-70	1.75	—	—
	1979-80	2.31	—	—
	1989-90	6.18	—	—
	1990-91	6.88	—	—
	1995-96	11.26	1.07	9.5
	1996-97	11.58	1.69	14.6
	1997-98	13.30	1.74	13.1
	1998-99	13.11	2.01	15.3
	1999-00	13.64	2.22	16.3
	2000-01	19.90	2.20	11.1
	2001-02*	21.13	1.99	9.4
Port of Tuticorin	1979-80	2.41	0.44	18.3
	1989-90	5.32	0.48	9.0
	1990-91	5.08	0.47	9.3
	1995-96	9.29	0.44	4.7
	1996-97	9.17	0.43	4.7
	1997-98	9.97	0.42	4.2
	1998-99	10.15	0.39	3.8
	1999-00	9.99	0.46	4.6
	2000-01	12.28	0.46	3.7
	2001-02*	13.02	0.43	3.3
New Mangalore	1979-80	0.90	0.21	23.3
	1989-90	7.66	0.58	7.6
	1990-91	8.03	0.61	7.6
	1995-96	8.88	0.96	10.8
	1996-97	12.45	4.92	39.5
	1997-98	15.28	6.51	42.6
	1998-99	14.21	6.46	45.5
	1999-00	17.60	8.32	47.3
	2000-01	17.89	10.92	61.0
	2001-02*	17.50	9.90	56.6
Ennore	2001-02*	3.40	0.00	0.0
Grand Total	1979-80	78.49	28.78	36.7
	1989-90	148.14	63.60	42.9
	1990-91	152.86	65.88	43.1
	1995-96	215.34	91.07	42.3
	1996-97	227.26	98.08	43.2
	1997-98	251.51	104.04	41.4
	1998-99	251.73	106.88	42.5
	1999-00	271.92	116.71	42.9
	2000-01	281.10	108.35	38.5
	2001-02*	287.57	103.26	35.9

Source: Ministry of Shipping.
*Provisional

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

Year	Tonnes Originating (000' MTS)	Earnings ("000' Rs.)	Average Lead (Kms.)	Earnings (Paisa/ Tonnes/Km)	Average Freight Col.3 Divided Col.2 (Rs. Tonnes)
1	2	3	4	5	6
1970-71	8857	464081	594	8.8	52.40
1975-76	11663	860925	605	12.2	73.82
1980-81	14954	1835693	780	15.7	122.76
1985-86	18635	4705145	588	42.9	252.49
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	28516	20310003	652	109.2	712.23
1997-98	30727	25212161	640	128.3	820.52
1998-99	32993	25740998	616	126.7	780.19
1999-00	34260	24733162	544	132.6	721.92
2000-01	36180	26632553	549	134.0	736.11
2001-02	35615	27456426	555	138.9	770.92

XI. 5 RAIL FREIGHT RATES IN RESPECT OF PETROLEUM PRODUCTS

(Rs./kms.)

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)								
15.04.1985	78.0	175.2	267.0	433.3	526.4	721.1	876.2	1011.5
01.04.1990	106.1	256.1	411.2	567.2	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
16-8-1991	120.0	289.5	465.0	743.3	910.7	1301.1	1599.2	1829.1
01-4-1992	129.0	311.2	499.9	799.0	979.0	1399.8	1719.1	1966.3
01-4-1993	141.9	342.3	549.4	894.9	1096.5	1567.8	1925.4	2202.3
01-4-1994	141.9	347.0	579.4	929.3	1163.4	1684.4	2090.2	2390.8
01-4-1995	151.8	371.3	620.0	994.4	1244.8	1802.3	2236.5	2558.2
01-8-1996	167.0	408.4	682.0	1093.8	1369.3	1982.5	2460.2	2814.0
01-4-1997	187.0	457.4	763.8	1225.1	1533.6	2220.4	2755.4	3151.7
01-4-1999	194.5	475.7	794.5	1274.1	1594.9	2309.2	2865.6	3277.8
01-4-2000	216.4	531.4	887.7	1425.2	1785.2	2584.7	3207.8	3669.2
01-4-2001	222.9	547.3	914.3	1468.0	1838.8	2662.2	3304.0	3779.3
01-4-2002	208.5	483.5	758.5	1171.0	1446.0	2133.5	2646.0	3021.0
NON-DANGEROUS (POL-PRODUCTS)								
15.04.1985	63.9	141.7	215.1	348.3	422.7	578.5	702.6	810.8
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
16-8-1991	105.5	252.6	404.8	646.0	791.0	1130.4	1387.7	1587.1
01-4-1992	109.5	261.7	409.0	668.4	818.2	1169.2	1435.1	1641.2
01-4-1993	133.4	320.4	514.6	836.4	1024.1	1464.2	1798.2	2056.5
01-4-1994	133.4	324.8	542.1	868.5	1086.6	1573.2	1952.1	2232.5
01-4-1995	142.7	347.5	580.0	929.3	1162.7	1683.3	2088.7	2388.8
01-8-1996	157.0	382.3	638.0	1022.2	1279.0	1851.6	2227.6	2827.7
01-4-1997	175.8	428.2	714.6	1144.9	1432.5	2073.8	2573.3	2943.0
01-4-1999	182.8	445.3	714.3	1190.7	1489.8	2156.8	2676.2	3060.7
01-4-2000	186.5	454.2	758.1	1214.5	1519.6	2199.9	2729.7	3121.9
01-4-2001	192.1	467.8	780.8	1250.9	1565.2	2265.9	2811.6	3215.6
01-4-2002	192.1	467.8	780.8	1250.9	1565.2	2265.9	2811.6	3215.6

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.

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

Type of Pipeline/owner	Length (in Kms.) As on 1st April							
	1995	1996	1997	1998	1999	2000	2001	2002
CRUDE PIPELINES (ON SHORE)								
ONGC	763	791	810	843	888	966	975	1181
OIL	1517	1524	1524	1524	1538	1538	1538	1538
IOC	1230	1230	1230	1689	2210	2373	2373	2352
HPCL		11	11	11	11	11	11	11
SUB TOTAL	3510	3556	3574	4067	4646	4888	4897	5082
CRUDE PIPELINES (OFF SHORE)								
ONGC	525	667	667	667	667	667	731	731
IOC	6	6	6	14	14	14	14	33
SUB TOTAL	531	673	673	681	681	681	745	764
GAS PIPELINES (ON SHORE)								
ONGC	371	630	644	654	679	685	687	759
GAIL	3038	3116	3829	3938	4017	4077	4205	4476
OIL	90	90	90	90	90	90	213	213
BPCL	2	2	2	2	2	2	2	2
SUB TOTAL	3500	3838	4564	4683	4787	4854	5107	5450
GAS PIPELINES (OFF SHORE)								
ONGC	622	638	638	638	638	638	660	660
SUB TOTAL	622	638	638	638	638	638	660	660
PRODUCT PIPELINES (ON SHORE)								
IOC(AOD)	108	69	69	69	69	69	75	75
IOC	2527	3981	3981	3981	3981	3981	4136	4142
BPCL	74	74	77	398	415	482	553	576
HPCL	—	191	191	563	563	585	585	808
ONGC	—	8	8	8	8	8	14	14
RPL	—	—	—	—	—	113	113	113
GAIL	—	—	—	—	—	—	1233	1233
SUB TOTAL	2709	4324	4327	5020	5037	5249	6709	6961
PRODUCT PIPELINES (OFF SHORE)								
BPCL	3	3	3	3	3	3	3	3
ONGC	48	48	48	48	48	48	48	48
SUB TOTAL	51	51	51	51	51	51	51	51
GRAND TOTAL	10924	13080	13828	15141	15841	16361	18169	18968

XII. MARKETING NETWORK

XII. 1 RETAIL OUTLETS IN INDIA AS ON 1ST JANUARY OF EACH YEAR, COMPANY-WISE

(NUMBERS)

Year	Retail Outlets	B/Shell BPCL	ESSO/ HPCL	CATLEX/ HPCL (VMU)	IOC	IBP	AOC/ AOD	TOTAL
1	2	3	4	5	6	7	8	9
1970	Nos.	3577	1922	1392	2655	233	129	9908
	%	10.1	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
1985	Nos.	3442	3451		4707	1062	202	12864
	%	26.7	26.8		36.6	8.3	1.6	100
1990	Nos.	3847	3829		5452	1228	268	14264
	%	26.3	26.2		37.3	8.4	1.9	100
1991	Nos.	3907	3910		5542	1258	276	14893
	%	26.2	26.3		37.3	8.4	1.9	100
1992	Nos.	3976	3946		5602	1287	281	15092
	%	26.2	26.2		37.2	8.5	1.9	100
1993	Nos.	4016	3968		5605	1294	283	15166
	%	26.5	26.2		37.0	8.5	1.9	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
1998	Nos.	4383	4315		6444	1440	311	16893
	%	25.9	25.5		38.1	0.5	2.0	100
1999	Nos.	4410	4345		6532	1442	311	17040
	%	25.9	25.5		38.3	8.5	1.8	100
2000	Nos.	4449	4480		6770	1461	312	17472
	%	25.5	25.6		38.7	8.4	1.8	100
2001	Nos.	4555	4536		7134	1475	315	18015
	%	25.3	25.2		39.6	8.2	1.7	100
2002	Nos.	4610	4642		7433	1551	318	18554
	%	24.8	25.0		40.1	8.4	1.7	100

Notes: 1. % Percentage.
2. Includes HPCL (VMU) retail outlets.
3. The data excludes consumers outlets.
Source: PSUs

XII. 2 STATE-WISE NUMBER OF RETAIL OUTLETS, MPDC'S, LDO/SKO DEALERS AND LPG DISTRIBUTORS AS ON 1.4.2002

(Numbers)

State/UT	Retail Outlets	MPDC'S Dealers	LDO/SKO Distributors	LPG
STATES				
Andhra Pradesh	1484	18	606	695
Arunachal Pradesh	34	2	32	27
Assam	371	1	357	201
Bihar	808	9	351	203
Chhatisgarh	244	0	105	91
Delhi	347	0	116	304
Goa	73	1	20	45
Gujarat	1152	12	493	473
Haryana	676	16	148	249
Himachal Pradesh	119	1	26	90
Jammu & Kashmir	151	1	41	126
Jharkhand	408	0	81	100
Karnataka	1096	4	324	439
Kerala	807	1	241	283
Madhya Pradesh	865	18	265	408
Maharashtra	1767	16	748	857
Manipur	31	3	35	25
Meghalaya	59	0	35	28
Mizoram	14	1	19	21
Nagaland	32	1	19	22
Orissa	414	7	176	143
Punjab	1137	14	240	393
Rajasthan	1200	28	252	374
Sikkim	13	0	12	3
Tamil Nadu	1648	0	466	508
Tripura	33	1	40	25
Uttar Pradesh	2419	64	646	823
Uttaranchal	204	0	65	105
West Bengal	1151	12	465	377
UNION TERRITORIES				
Andama & Nicobar	5	0	1	1
Chandigarh	39	0	11	31
Dadra & Nagar Haveli	5	0	2	1
Daman & Diu	6	0	5	2
Lakshdweep	0	0	0	1
Pondicherry	36	0	8	12
GRAND TOTAL	**18848**	**231**	**6451**	**7486**

Source: Petroleum Planning & Analysis Cell, New Delhi.

XII. 3 STATE-WISE AND COMPANY-WISE RETAIL OUTLETS AS ON 1.4.2002

(Numbers)

State/UT	IOCL	IBP	HPCL	BPCL	AOD	TOTAL
1	2	3	4	5	6	7
Andhra Pradesh	565	123	421	375	0	1484
Arunachal Pradesh	15	0	0	0	19	34
Assam	123	12	38	4	194	371
Bihar	343	99	162	202	2	808
Chhatisgarh	94	11	72	67	0	244
Chandigarh	14	4	11	10	0	39
Delhi	131	40	85	91	0	347
Goa	12	3	26	32	0	73
Gujarat	474	125	258	295	0	1152
Haryana	293	106	146	127	4	676
Himachal pradesh	57	3	31	28	0	119
Jammu and Kashmir	76	4	33	38	0	151
Jharkhand	156	25	118	109	0	408
Karnataka	450	51	298	297	0	1096
Kerala	283	44	259	22	0	807
Madhya Pradesh	400	40	202	223	0	865
Maharashtra	573	100	545	549	0	1767
Manipur	13	0	0	0	18	31
Meghalaya	22	3	5	2	27	59
Mizoram	5	0	0	0	9	14
Nagaland	12	0	0	0	20	32
Orissa	171	14	102	125	2	414
Punjab	467	199	229	242	0	1137
Rajasthan	513	60	345	281	1	1200
Sikkim	6	2	2	3	0	13
Tamil Nadu	635	59	477	477	0	1648
Tripura	8	0	0	0	25	33
Uttar Pradesh	1082	299	491	547	0	2419
Uttaranchal	78	19	55	52	0	204
West Bengal	440	111	305	294	1	1151
A. & Nicobar	5	0	0	0	0	5
D & Nagar Haveli	2	0	2	1	0	5
Pondicherry	16	3	11	6	0	36
Daman & Diu	3	0	0	3	0	6
GRAND TOTAL	**7537**	**1559**	**4729**	**4701**	**322**	**18848**

Source: Petroleum Planning & Analysis Cell.

XII. 4 STATEWISE NUMBER OF LPG DOMESTIC CONSUMERS AS ON 1.04.2002

(Figs: in Lakhs)

States	IOC (MD)	IOC (AOD)	IOC TOTAL	BPC	HPC	IBP	Total
ANDHRA PRADESH	23.36	0.00	23.36	12.82	28.60	0.07	64.85
ARUNACHAL PRADESH	0.19	0.64	0.83	0.00	0.00	0.00	0.83
ASSAM	4.91	6.34	11.25	0.01	0.01	0.00	11.27
BIHAR	10.42	0.00	10.42	0.57	1.45	0.00	12.44
CHATTISGARH	2.71	0.00	2.71	0.86	1.94	0.00	5.52
DELHI	21.52	0.00	21.52	7.50	4.19	0.00	33.21
GOA	0.02	0.00	0.02	1.18	1.97	0.00	3.16
GUJARAT	22.94	0.00	22.94	7.74	8.02	0.05	38.75
HARYANA	10.80	0.00	10.80	6.83	3.21	0.14	20.97
HIMACHAL PRADESH	7.32	0.00	7.32	0.29	1.02	0.00	8.63
JAMMU & KASHMIR	2.65	0.00	2.65	0.96	5.32	0.00	8.93
JHARKHAND	4.72	0.00	4.72	1.77	0.83	0.00	7.33
KARNATAKA	13.13	0.00	13.13	7.26	12.50	0.00	32.89
KERALA	18.61	0.00	18.61	8.91	4.07	0.00	31.59
MADHYA PRADESH	13.93	0.00	13.93	4.58	7.18	0.00	25.68
MAHARASHTRA	7.01	0.00	7.01	40.19	38.70	0.00	85.90
MANIPUR	0.35	1.14	1.49	0.00	0.00	0.00	1.49
MEGHALAYA	0.32	0.35	0.66	0.00	0.00	0.00	0.66
MIZORAM	0.53	0.81	1.34	0.00	0.00	0.00	1.34
NAGALAND	0.29	0.50	0.79	0.00	0.00	0.00	0.79
ORISSA	3.10	0.00	3.10	1.16	3.86	0.00	8.12
PUNJAB	16.79	0.00	16.79	6.82	5.41	0.40	29.42
RAJASTHAN	11.19	0.00	11.19	7.31	6.74	0.00	25.24
SIKKIM	0.56	0.00	0.56	0.00	0.00	0.00	0.56
TAMILNADU	37.98	0.00	37.98	15.37	7.58	0.66	61.59
TRIPURA	0.62	0.85	1.47	0.00	0.00	0.00	1.47
UTTAR PRADESH	40.52	0.00	40.52	15.42	7.97	0.08	63.99
UTTARANCHAL	9.44	0.00	9.44	1.15	0.13	0.00	10.72
WEST BENGAL	22.05	0.04	22.08	3.40	6.88	0.13	32.49
TOTAL	**307.96**	**10.67**	**318.62**	**152.09**	**157.60**	**1.52**	**629.83**
UNION TERRITORIES							
ANDAMAN & NICOBAR	0.29	0.00	0.29	0.00	0.00	0.00	0.29
CHANDIGARH	1.74	0.00	1.74	0.41	0.62	0.00	2.77
DADRA & NAGAR HAVELI	0.00	0.00	0.00	0.00	0.19	0.00	0.19
DAMAN & DIU	0.00	0.00	0.00	0.00	0.24	0.00	0.24
LAKSHADWEEP	0.02	0.00	0.02	0.00	0.00	0.00	0.02
PONDICHERRY	0.69	0.00	0.69	0.25	0.73	0.00	1.67
TOTAL	**2.74**	**0.00**	**2.74**	**0.66**	**1.78**	**0.00**	**5.18**
ALL INDIA	**310.70**	**10.67**	**321.36**	**152.75**	**159.38**	**1.52**	**635.01**

XII.5 CNG ACTIVITIES IN INDIA AS ON 1.4.2002

Item	Delhi	Maharashtra	Gujarat				Grand
	Delhi IGL	Maharashtra MGL	Vadodara GAIL	Surat GGCL	Ankleshwar GGCL	Total	Total
1	2	3	4	5	6	7	8
Station Type							
Mother	25	2	1	1	0	2	29
Online	13	9	0	1	0	1	23
Daughter Booster	26	13	0	0	0	0	39
Daughter	30	1	2	1	1	4	35
Total	**94**	**25**	**3**	**3**	**1**	**7**	**126**
No. of Vehicles							
Cars	15166	27325	152	636	103	891	43382
Autos	36565	7853	0	429	0	429	44847
RTVs	2165	0	0	0	0	0	2165
Buses	4231	46	0	0	0	0	4277
Total	58127	35224	152	1065	103	1320	94671
Price (Rs./Kg.)	13.11	19.71	13.31	19.73	20.39		
Average Consumption							
TPD	355.00	118.91	0.39	1.67	0.19	2.25	476.16
MMSCMD	0.4416	0.1665	0.0005	0.0021	0.0002	0.0028	0.5923

NOTE:
1 Kg of CNG=1.244 SCM of Gas=1.391 litres of petrol on energy equivalent basis

GAIL = Gas Authority of India Ltd.
IGL = Indraprashtha Gas Ltd.
MGL = Mahanagar Gas Ltd.
GGCL = Gujarat Gas Company Ltd.
TPD = Tonnes per day
MMSCMD: Million Standard Cubic Metres Per Day

XII. 6 SUPPLY PLAN OF GREEN FUELS IN INDIA

SPECIFICATION	Metros		Taj Trapezium		State/UT capitals and major cities		All India	
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual
Motor Spirit								
Low Lead (0.15 gm./ltr.)	Dec, 1996	June 1994	-	Sept. 1995	-	-	Dec, 1996	Dec., 1996
Unleaded (0.013 gm./ltr.)	Dec., 1997 in Delhi & Mumbai	In all Metros & Radial routes: April 1995	-	April 1995	Dec., 1998	June 1998		1.2.2000
Ultra Low Sulphur (0.05%)		NCR w.e.f. 1.4.2000 Kolkata w.e.f. 1.10.2000 Chennai w.e.f. 1.7.2001			Hyderabdad/Secunderabad* Mumbai** w.e.f. 16.12.02	16.12.2002		
MS with max 3% Benzene Ultra Low Sulphur (0.05%) with 1% Benzene max.	NCT w.e.f 1.11.2000 GR. Mumbai w.e.f. 1.1.2001 NCR w.e.f. 31.3.2001	April, 2000						
MS with 0.05% Sulphur (max.)					Agra*, Kanpur*, Ahmedabad*, Pune*, Bangalore* & Surat city w.e.f. 01.04.2003	01.04.03		
		HIGH SPEED DIESEL (HSD)						
Low Sulphur (0.5%)	April, 1996	April, 1996	April, 1996	April, 1996	-	-	-	-
Extra Low Sulphur (0.25%)	April, 1999	Inner Delhi: Aug., 1997 Other metros and whole Delhi: Apr. 1998	Sep., 1996	Sep. 1996	-	-	1.1.2000	1.1.2000
Ultra Low Sulphur (0.05%)		NCR w.e.f. 1.4.2000 for non-comml. vehicle conforming to EURO-II norms GR. Mumbai w.e.f 1.1.2001 NCT for all types of vehicles w.e.f 1.3.2001 NCR for all types of vehicles w.e.f 30.6.2001 Kolkata w.e.f 1.7.2001 Chennai w.e.f. 1.7.2001			Hyderabad/Secunderabad* Mumbai** w.e.f. 16.12.02	16.12.2002		
HSD with 0.05% Sulphur (max.)					Agra*, Kanpur*, Ahmedabad*, Pune*, Bangalore* & Surat city w.e.f. 01.04.2003	01.04.03		

* Urban agglomeration
** Mumbai Metropolitan area

XIII. ENERGY

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	0	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	-	36376
1970-71	72.95	3.39	76.34	1445	6822	18333	28162	25248	2417	55827
1975-76	99.63	3.03	102.66	2368	8448	22055	43303	33302	2626	79231
1980-81	113.91	5.11	119.02	2358	10507	25348	61301	48542	3001	110844
1985-86	154.20	8.05	162.25	8134	30168	42735	114119	50933	4985	170037
1990-91	211.73	13.77	225.50	17998	33021	52201	186452	71535	6244	264231
1991-92	229.28	14.55	243.83	18645	30346	52213	208551	72599	5561	286711
1992-93	238.26	16.62	254.88	18060	26950	54435	224485	69833	6748	301066
1993-94	246.04	18.10	264.14	18335	27026	55305	247618	70311	5394	323323
1994-95	253.80	19.34	273.14	19381	32239	57400	282900	82500	5600	351000
1995-96	270.13	22.14	292.27	22308	35170	58320	299600	72500	8000	380100
1996-97	285.66	22.54	308.20	23255	32901	62500	316870	68610	9010	394490
1997-98	295.93	23.05	318.98	26401	33858	64820	336100	74480	10040	420620
1998-99	292.27	23.42	315.69	27428	32723	68240	356800	82620	11890	448410
1999-00	299.97	22.12	322.09	28446	31949	86964	386226	80533	13252	480011
2000-01	309.63	22.95	332.58	29477	32426	104559	409289	74481	16928	500698
2001-02*	327.79	24.81	352.60	29714	32032	109482	422000	73900	16300	515200

*Provisional
@: Inlcudes RBF and LPG production from Natural Gas
kwh: Kilowatt Hour
Source: (i) Central Electricity Authority and Economic Survey
(ii) Coal Statistics—Coal Controller organisation, Ministry of Coal

XIII. 2 TRENDS IN COMMERCIAL ENERGY PRODUCTION

Energy From	Unit	PRODUCTION						
		1950-51	1960-61	1970-71	1980-81	1990-91	2001-02	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Coal	MMT	33.00	55.67	72.95	144.01	211.73	32565	405.0
Lignite	MMT	-	0.05	3.39	4.80	13.77	24.30	55.96
Crude Oil	MMT	0.26	0.45	6.82	10.51	33.02	32.03	33.97
Natural Gas	BCM	-	-	1.44	2.35	1.79	29.69	37.62
Hydro Power	BkWh	2.52	7.84	25.25	46.54	71.66	82.80	103.49
Nuclear Power	BkWh	-	-	2.42	3.00	6.14	16.92	19.30
Wind Power	BkWh	-	-	-	-	0.03	1.70	4.00

Source: Tenth Plan Document

XIII. 3 ENERGY CONSUMPTION BY FUEL& BY SECTOR

a. PERCENTAGE SHARE OF DIFFERENT FUELS IN COMMERCIAL ENERGY CONSUMPTION

PRODUCT	1953-54	1960-61	1970-71	1980-81	1990-91	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Coal	80.10	75.30	56.10	47.90	35.90	298.90
Oil & Gas	16.70	19.90	34.70	41.40	49.10	54.00
Electricity	3.20	4.80	9.20	10.70	15.00	17.10
Total	100.00	100.00	100.00	100.00	100.00	100.00

b. PERCENTAGE SHARE IN FINAL CONSUMPTION BY DIFFERENT SECTORS

SECTOR	1953-54	1960-61	1970-71	1980-81	1990-91	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Industry	39.90	4150	49.60	49.60	44.70	41.90
Transport	43.70	40.20	28.20	23.50	19.80	22.30
Household	9.60	9.70	12.20	9.70	11.80	12.10
Agriculture	1.40	1.60	2.70	6,.30	8.20	9.00
Others	5.40	7.00	7.30	10.90	15.50	14.70
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: NinthPlan Document, Volume II.

PART-II
INTERNATIONAL PETROLEUM STATISTICS

PART-II
INTERNATIONAL PETROLEUM STATISTICS

XIV. 1(b) WORLD PROVED RESERVES OF NATURAL GAS AT END 2001

COUNTRY	Thousand million barrels	Thousand million tonnes	Share of total%	R/P ratio
(1)	(2)	(3)	(4)	(5)
USA	5.02	177.4	3.2%	9.2
Canada	1.69	59.7	1.1%	9.8
Mexico	0.84	29.5	0.5%	24.0
Total North America	7.55	266.7	4.9%	10.0
Argentia	0.78	27.5	0.5%	20.3
Bolivia	0.68	24.0	0.4%	·
Brazil	0.22	7.8	0.1%	28.8
Colombia	0.12	4.3	0.1%	20.1
Ecuador	0.10	3.7	0.1%	·
Trinidad & Tobago	0.66	23.5	0.4%	51.4
Venezuela	4.18	147.6	2.7%	·
Other S. & Cent. America	0.42	14.7	0.3%	·
Total S. & Cent. America	7.16	253.0	4.6%	71.6
Denmark	0.08	2.7	▲	9.2
Germany	0.34	12.1	0.2%	20.1
Hungary	0.04	1.3	▲	13.3
Italy	0.23	8.1	0.1%	14.8
Netherlands	1.77	62.5	1.1%	25.1
Norway	1.25	44.0	0.8%	21.7
Romania	0.10	3.6	0.1%	8.0
United Kingdom	0.73	26.0	0.5%	6.9
Other Europe	0.32	11.4	0.2%	27.8
Total Europe	4.86	171.7	3.1%	16.1
Azerbaijan	0.85	30.0	0.5%	·
Kazakhstan	1.84	65.0	1.2%	·
Russian Federation	47.57	1680.0	30.7%	83.1
Turkmenistan	2.86	101.0	1.8%	56.5
Ukraine	1.12	39.6	0.7%	62.2
Uzbekistan	1.87	66.2	1.2%	33.2
Other Former Soviet Union	0.02	0.8	▲	55.8
Total Former Soviet Union	56.14	1982.6	36.2%	78.5
Bahrain	0.09	3.2	0.1%	10.3
Iran	23.00	812.3	14.8%	·
Iraq	3.11	109.8	2.0%	·
Kuwait	1.49	52.7	1.0%	·
Oman	0.83	29.3	0.5%	61.9
Qatar	14.40	508.5	9.3%	·
Saudi Arabia	8.22	219.5	4.0%	·
United Arab Emirates	6.01	212.1	3.9%	·
Yemen	0.48	16.9	0.3%	·
Other Middle East	0.29	10.2	0.2%	56.7
Total Middle East	55.91	1974.6	36.1%	·
Algeria	4.52	159.7	2.9%	57.8
Egypt	1.00	35.2	0.6%	47.5
Libya	1.31	46.4	0.8%	·
Nigeria	3.51	124.0	2.3%	·
Other Africa	0.84	29.5	0.5%	·
Total Africa	11.19	394.8	7.2%	90.2
Australia	2.55	90.0	1.6%	77.9
Bangladesh	0.30	10.6	0.2%	27.8
Brunei	0.39	13.8	0.3%	34.3
China	1.37	48.3	0.9%	45.1
India	0.65	22.9	0.4%	24.5
Indonesia	2.62	92.5	1.7%	41.6
Malaysia	2.12	75.0	1.4%	44.8
Pakistan	0.71	25.1	0.5%	35.6
Papua New Guinea	0.35	12.2	0.2%	·
Thailand	0.36	12.7	0.2%	19.9
Vietnam	0.19	6.8	0.1%	96.3
Other Asia Pacific	0.66	23.4	0.4%	36.9
Total Asia Pacific	12.27	433.3	7.9%	43.8
TOTAL WORLD	155.08	5476.7	100.0%	61.9
of which: European Union 15	3.21	113.4	2.1%	14.5
OECD#	14.87	525.0	9.6%	13.7

*Over 100 years.
†Less than 0.05.
▲ Less than 0.05%.
#1981 excludes Central European members.
n/a not available
Notes:
Proved reserves of natural gas-Generally taken to be those quantities the geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions.
Reserves/Production (R/P) ratio—If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that level.
Source:BP Amoco Statistical Reviews ofworldEnergy-2002

XIV. 2 WORLD CRUDE OIL* PRODUCTION 1996—2001

(Million tonnes)

COUNTRY	1996	1997	1998	1999	2000	2001	%Change 2001/00	%Share of total
USA	382.1	390.0	368.1	352.6	352.6	251.7	-0.3%	9.8%
Canada	115.5	120.7	125.1	121.0	126.9	129.1	1.7%	3.6%
Mexico	162.6	169.7	173.5	165.2	171.2	176.6	3.1%	4.9%
Total North America	**660.1**	**670.4**	**666.7**	**638.8**	**650.8**	**657.4**	**1.0%**	**18.3%**
Argentina	40.8	43.4	44.0	41.7	40.2	40.6	1.1%	1.1%
Brazil	40.2	43.1	49.8	56.3	63.2	66.3	5.0%	1.9%
Colombia	31.8	33.2	36.5	41.6	35.3	31.0	-12.1%	0.9%
Ecuador	20.0	20.2	19.5	19.4	20.9	21.2	1.4%	0.6%
Peru	6.0	5.9	5.8	5.7	4.9	4.9	0.5%	0.1%
Trinidad & Tobago	7.0	6.7	6.7	7.0	6.8	6.5	-4.3%	0.2%
Venezuela	162.2	171.4	181.0	167.1	171.6	176.2	2.7%	0.2%
Other S. & Cent. America	4.8	5.3	6.0	6.4	6.8	7.3	7.1%	0.2%
Total S. Cent. America	**312.7**	**329.1**	**351.4**	**345.1**	**349.6**	**354.0**	**1.3%**	**9.9%**
Denmark	10.1	11.4	11.4	14.7	17.8	16.9	-4.9%	0.5%
Italy	5.5	6.0	5.6	5.0	4.6	4.1	-10.7%	0.1%
Norway	155.5	156.9	150.0	149.4	160.5	162.1	1.0%	4.5%
Romania	6.9	6.8	6.6	6.4	6.3	6.2	-0.7%	0.2%
United Kingdom	129.7	128.2	132.5	137.1	126.2	117.9	-6.6%	3.3%
Other Europe	20.0	18.8	18.0	16.7	16.3	16.5	0.8%	0.5%
Total Europe	**327.6**	**327.9**	**324.2**	**329.2**	**331.8**	**323.7**	**-2.4%**	**9.0%**
Azerbaijan	9.1	9.2	11.4	13.8	14.0	14.9	6.6%	0.4%
Kazakhstan	23.0	25.8	25.9	30.1	35.3	39.7	12.4%	1.1%
Russian Federation	302.9	304.3	304.3	304.8	323.3	348.1	7.7%	9.7%
Turkmenistan	4.4	5.4	6.4	7.1	7.2	8.0	12.0%	0.2%
Uzbekistan	7.6	7.9	8.2	8.1	7.5	7.3	-3.2%	0.2%
Other Former Soviet Union	6.4	6.4	6.2	6.1	6.1	6.2	2.3%	0.2%
Total Former Soviet Union	**353.3**	**362.0**	**362.5**	**369.9**	**393.3**	**424.2**	**7.8%**	**11.8%**
Iran	184.8	185.1	188.9	176.2	187.7	182.9	-2.6%	5.1%
Iraq	30.0	58.3	105.6	126.1	128.6	117.9	-8.4%	3.3%
Kuwait	105.0	105.2	107.9	99.5	106.0	104.2	-1.7%	2.9%
Oman	44.4	44.9	44.7	45.0	47.6	47.4	-0.5%	1.3%
Qatar	26.2	32.2	34.6	33.4	36.8	36.0	-2.3%	1.0%
Saudi Arbia	436.3	443.8	444.5	411.9	441.4	422.9	-4.2%	11.8%
Syria	29.4	28.9	28.8	29.0	27.6	27.3	-1.1%	0.8%
United Arab Emirates	117.9	117.0	119.9	107.6	117.0	113.2	-3.2%	3.2%
Yemen	16.9	17.7	18.1	18.7	20.8	21.7	4.2%	0.6%
Other Middle East	2.3	2.3	2.3	2.2	2.3	2.3	-0.3%	0.1%
Total Middle East	**993.2**	**1035.4**	**1095.2**	**1049.6**	**1115.8**	**1075.6**	**-3.6%**	**30.0%**
Algeria	59.3	60.3	61.8	63.9	66.8	65.8	-1.6%	1.8%
Angola	35.4	36.5	36.0	36.7	36.4	36.0	-1.0%	1.0%
Cameroon	5.6	6.3	5.3	4.8	4.5	4.1	-9.3%	0.1%
Republic of Congo (Brazzaville)	10.4	11.6	13.6	15.1	14.2	14.0	-1.8%	0.4%
Egypt	45.1	43.8	43.0	41.4	38.8	37.3	-3.8%	1.0%
Equatorial Guinea	0.9	3.0	4.1	5.0	5.6	9.0	60.1%	0.3%
Gabon	18.3	18.2	16.9	17.0	16.4	15.0	-8.2%	0.4%
Libya	68.6	70.0	69.6	67.0	69.5	67.0	-3.7%	1.9%
Nigeria	104.7	112.7	105.9	99.2	103.3	105.2	1.9%	2.9%
Tunisia	4.2	3.8	4.0	4.1	3.8	3.4	-9.1%	0.1%
Other Africa	3.3	3.6	3.6	5.9	11.7	13.9	19.0%	0.4%
Total Africa	**355.7**	**369.7**	**363.7**	**360.0**	**370.9**	**370.7**	**-0.1%**	**10.3%**
Australia	26.6	28.8	27.4	24.5	35.4	31.8	-10.1%	0.9%
Brunei	8.0	7.9	7.6	8.9	9.4	9.5	0.8%	0.3%
China	158.5	160.1	160.2	160.2	162.6	164.9	1.4%	4.6%
India	36.5	37.3	37.0	36.5	36.1	36.1	▲	1.0%
Indonesia	76.7	75.7	74.2	68.6	71.5	68.6	-4.1%	1.9%
Malaysia	34.4	35.1	36.9	35.6	35.5	35.1	-1.1%	1.0%
Papua New Guinea	5.0	3.5	3.8	4.1	3.2	2.7	-17.6%	0.1%
Thailand	3.8	4.5	4.7	5.2	6.6	7.1	6.7%	0.2%
Vietnam	8.9	10.1	12.1	14.6	16.2	17.1	5.4%	0.5%
Other Asia Pacific	6.7	7.3	6.6	6.3	6.3	6.6	5.2%	0.2%
Total Asia Pacific	365.2	370.3	370.5	364.4	382.9	**379.4**	-0.9%	10.6%
TOTAL WORLD	**3367.8**	**3464.9**	**3534.1**	**3457.0**	**3595.0**	**3584.9**	**-0.3%**	**100.0%**
of which OECD	1007.3	1020.9	1011.9	986.5	1011.9	1006.9	-0.5%	28.1%
OPEC	1371.7	1431.8	1493.8	1420.4	1500.2	1459.7	-2.7%	40.7%
Non-OPEC‡	1642.8	1671.1	1677.8	1666.6	1701.5	1701.0	▲	47.4%

*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.

▲ Less than 0.05%.

‡ Excludes Former Soviet Union.

Note: Because of rounding some totals may not agree exactly with the sum of their component parts.

Source:BP Amoco Statistical Review of World Energy-2002.

XIV. 3 CRUDE OIL PRODUCTION BY OPEC MEMBER COUNTRIES

(Million Tonnes)

OPEC Countries	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Algeria	52	48	58	58	57	57	56	57	59	60	62	64	67	66
Indonesia	78	65	72	78	74	74	74	74	74	73	72	69	72	69
Iran	74	110	161	173	175	182	183	183	184	184	188	176	188	183
Iraq	130	71	105	14	26	23	25	27	30	58	105	126	129	118
Kuwait	72	54	62	10	55	96	104	105	106	105	108	99	106	104
Libya	88	53	69	74	71	67	69	69	70	71	69	67	70	67
Nigeria	102	73	90	94	97	98	98	98	105	113	107	99	103	105
Qatar	22	16	21	20	23	21	21	21	26	30	37	33	37	36
Saudi Arabia	493	182	341	427	441	431	426	427	435	442	443	412	441	423
U.A.E.	112	49	105	121	115	111	113	111	115	114	116	108	117	113
Venezuela	116	90	116	129	130	134	142	152	162	174	172	167	172	176
Total	1339	811	1199	1198	1262	1295	1311	1324	1366	1425	1488	1420	1502	1460

Source: B.P. Amoco Statistical Review of World Energy-2002.
*Provisional

XIV. 4 WORLD PRODUCTION OF NATURAL GAS* 1994-2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over 2000/2001	%Share of total 2001
USA	4876	481.4	488.0	488.8	494.3	487.4	490.4	499.9	1.9%	22.5%
Canada	122.3	133.4	138.2	140.6	144.5	151.0	154.8	168.1	2.5%	7.0%
Mexico	25.8	25.3	28.1	30.4	32.9	34.6	33.4	31.3	-6.3%	1.4%
Total North America	**635.7**	**64.01**	**654.3**	**659.8**	**671.7**	**668.0**	**674.8**	**686.0**	**1.6%**	**30.9%**
Argentina	20.0	22.5	23.9	24.65	26.6	31.1	33.7	34.5	2.6%	1.6%
Bolivia	3.0	2.8	2.9	2.9	2.8	2.3	3.1	3.7	20.5%	0.2%
Brazil	4.1	4.3	5.0	5.4	5.6	6.1	6.1	6.9	13.3%	0.3%
Colombia	3.7	4.0	4.2	5.3	5.6	4.7	5.3	5.5	3.0%	0.2%
idad & Tobago	5.6	5.5	6.4	6.7	7.8	9.8	11.7	11.6	-0.5%	0.5%
Venezuela	22.2	24.8	26.8	27.7	29.1	24.7	25.1	26.0	3.3%	1.2%
Other S. & Cent. America	2.0	2.0	2.0	2.1	2.3	1.9	1.9	1.8	-2.6%	0.1%
Total S. & Cent. America	**60.6**	**65.9**	**71.2**	**74.7**	**79.8**	**80.6**	**86.9**	**90.0**	**3.7%**	**4.1%**
Denmark	4.4	4.8	5.8	7.1	6.8	7.0	7.3	7.5	3.5%	0.3%
Germany	14.0	14.5	15.7	15.4	15.0	16.1	15.2	15.3	0.9%	0.7%
Hungary	3.7	3.7	3.6	3.3	3.0	2.6	2.4	2.5	1.0%	0.1%
Italy	18.6	18.3	18.0	17.3	17.1	15.7	14.6	13.9	-4.6%	0.6%
Netherlands	59.7	60.3	68.2	60.4	57.2	53.3	51.6	55.2	7.1%	2.5%
Norway	27.7	28.0	36.9	42.0	43.0	45.9	48.6	51.7	6.4%	2.3%
Romania	16.8	16.2	15.5	13.5	12.6	12.6	12.4	11.3	-8.5%	0.5%
United Kingdom	58.2	63.7	75.8	77.3	81.2	89.2	97.4	95.2	-2.3%	4.3%
Other Europe	13.0	13.2	12.0	11.5	11.0	10.5	10.6	10.5	-1.4%	0.5%
Total Europe	**216.1**	**222.7**	**251.5**	**247.8**	**246.9**	**252.9**	**260.1**	**263.1**	**1.2%**	**11.9%**
Azerbaijan	5.4	5.5	5.3	5.0	4.7	5.0	4.7	4.7	-2.0%	0.2%
Kazakhstan	3.8	5.0	5.5	6.8	6.7	8.4	9.7	9.7	0.3%	0.4%
Russian Federation	509.8	499.9	505.0	479.3	496.2	495.9	490.5	488.2	-0.5%	22.0%
Turkmenistan	30.0	27.1	29.6	14.5	11.2	19.1	39.5	43.1	9.1%	1.9%
Ukraine	15.3	15.3	15.4	15.7	15.1	15.2	15.0	15.4	2.3%	0.7%
Uzekistan	39.6	40.8	41.1	43.0	46.0	46.7	47.4	48.2	1.8%	2.2%
Other Former soviet Union	0.3	0.3	0.2	0.3	0.4	0.3	0.4	0.3	-8.7%	▲
Total Former Soviet Union	**604.2**	**593.9**	**602.1**	**564.6**	**580.3**	**590.6**	**607.2**	**609.6**	**0.4%**	**27.5%**
Bahrain	6.4	6.5	6.7	7.2	7.5	7.8	7.9	8.0	1.4%	0.4%
Iran	28.6	31.8	35.1	42.3	45.0	52.0	54.2	54.5	0.6%	2.5%
Kuwvait	5.4	8.4	8.4	8.3	8.5	7.8	8.6	8.6	-1.0%	0.4%
Japan	2.6	3.6	3.9	4.5	4.7	4.9	7.6	12.1	59.7%	0.5%
Qatar	12.2	12.2	12.3	15.7	17.6	19.8	26.2	29.3	11.7%	1.3%
Saudi Arabia	38.5	38.6	40.0	40.8	42.1	41.6	44.8	48.3	7.8%	2.2%
United Arab Emirates	23.2	28.2	30.4	32.7	33.4	34.6	35.9	37.2	3.8%	1.7%
Other Middle East	4.4	4.8	5.4	6.5	6.7	7.1	7.1	7.3	2.0%	0.3%
Total Middle East	**121.3**	**134.1**	**142.2**	**158.0**	**165.5**	**175.6**	**192.3**	**205.3**	**6.7%**	**9.3%**
Algeria	46.5	52.8	56.1	64.6	68.9	77.4	76.0	70.4	-7.3%	3.2%
Egpt	9.5	9.9	10.4	10.5	11.0	13.2	16.5	18.9	14.4%	0.9%
Libya	5.2	5.2	5.2	5.4	5.2	5.0	4.9	4.9	-	0.2%
Nigeria	4.0	4.4	4.9	4.6	4.6	5.4	9.8	12.1	23.6%	0.5%
Other Africa	2.6	2.7	3.8	4.4	4.5	4.9	5.1	5.4	5.8%	0.2%
Total Africa	**67.8**	**75.0**	**80.4**	**89.5**	**94.2**	**105.9**	**112.3**	**111.7**	**-0.5%**	**5.0%**
Australia	25.3	26.8	27.5	27.0	27.3	27.5	28.0	29.4	5.3%	1.3%
Bangladesh	6.0	6.6	6.8	6.8	7.0	7.5	9.0	9.7	8.2%	0.4%
Brunei	9.4	10.6	10.5	10.5	9.7	10.1	10.2	10.3	1.0%	0.5%
China	14.9	15.8	17.9	20.0	20.1	21.9	24.5	27.3	11.5%	1.2%
India	15.6	16.9	18.4	18.6	22.2	22.4	23.5	23.7	1.1%	1.1%
Indonesia	56.6	57.4	60.4	60.8	58.2	64.3	60.5	56.6	-6.4%	2.6%
Malaysia	23.5	26.0	30.3	34.8	34.6	36.8	40.7	42.7	4.7%	1.9%
Pakistan	12.0	13.1	13.8	14.0	14.4	15.6	17.0	17.9	5.2%	0.8%
Thailand	8.6	9.1	10.6	12.7	13.9	15.3	16.1	16.3	1.0%	0.7%
Other Asia Pacific	8.5	8.3	9.2	9.7	9.5	10.4	16.7	18.1	8.3%	0.8%
Total Asia Pacific	**180.4**	**190.6**	**205.4**	**214.9**	**216.9**	**231.8**	**246.2**	**252.0**	**2.4%**	**11.4%**
Total World	**1886.1**	**1922.3**	**2007.1**	**2009.3**	**2055.3**	**2105.4**	**2179.8**	**2217.7**	**1.7%**	**100.0%**
Which European Union 15	161.8	168.3	189.3	183.0	182.1	185.7	190.4	191.6	0.6%	8.6%
OECD	864.0	876.4	921.8	925.5	937.3	940.5	955.5	972.3	1.8%	43.8%
Former Soviet Union	604.2	593.9	602.1	564.6	580.3	590.6	607.2	609.6	0.4%	27.5%
Other EMEs	418.0	451.9	483.0	519.3	537.9	574.2	617.1	635.8	3.0%	28.7%

*Including gas flared or recycled.

▲ Less than 0.05%.

Note: Because of rounding some totals may not agree exactly with the sum of their component parts.

Source: BP Amoco Statistical Review of World Energy-2002

XIV.5 WORLD CONSUMPTION OF NATURAL GAS 1994-2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change 2001/2000	%Share of toal
USA	536.5	558.5	568.5	567.8	552.8	559.6	582.4	554.6	-4.8%	25.6%
Canada	63.8	63.8	68.9	67.3	63.3	65.4	69.8	65.4	-6.4%	3.0%
Mexico	26.5	26.7	27.9	28.5	30.9	30.4	31.4	30.4	-3.3%	1.4%
Total North America	**626.8**	**649.0**	**663.3**	**663.6**	**647.0**	**655.4**	**683.6**	**650.4**	**-4.9%**	**30.0%**
Argentina	21.9	24.3	25.7	25.7	27.5	29.1	29.9	29.9	▲	1.4%
Brazil	4.1	4.3	5.0	5.4	5.6	6.4	8.2	9.8	19.3%	0.5%
Chile	1.5	1.5	1.5	2.5	2.9	4.1	4.7	5.0	6.5%	0.2%
Colombia	3.7	4.0	4.2	5.3	5.6	4.7	5.3	5.5	2.6%	0.3%
Ecuador	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	▲	▲
Peru	0.4	0.4	0.4	0.2	0.4	0.4	0.3	0.3	7.1%	▲
Venezuela	22.2	24.8	26.8	27.7	29.1	24.7	25.1	26.0	3.3%	1.2%
Other S. & Cent. America	6.5	6.5	7.4	8.0	8.8	9.3	10.1	10.6	5.2%	0.5%
Total S. & Cent. America	**60.4**	**65.9**	**71.1**	**74.9**	**80.0**	**78.8**	**83.7**	**87.2**	**4.1%**	**4.0%**
Austria	5.8	6.1	6.6	6.9	6.8	6.9	6.6	6.6	0.6%	0.3%
Belgium & Luxembourg	9.7	10.6	11.8	11.3	12.4	13.3	13.4	13.2	-1.4%	0.6%
Bulgaria	3.7	4.5	4.6	3.7	3.1	2.7	2.6	2.3	-9.3%	0.1%
Czech Republic	5.7	6.5	7.6	7.7	7.7	7.7	7.5	8.0	7.0%	0.4%
Denmark	2.7	3.1	3.7	3.9	4.3	4.5	4.4	4.6	4.4%	0.2%
Finland	2.8	2.9	3.0	2.9	3.3	3.3	3.4	3.7	8.5%	0.2%
France	27.8	29.6	32.5	31.2	33.3	33.9	35.7	36.6	2.5%	1.7%
Germany	61.1	67.0	75.2	71.3	71.7	72.1	71.5	74.6	4.3%	3.4%
Greece	†	†	†	0.2	0.7	1.2	1.7	1.8	1.1%	0.1%
Hungary	8.4	9.2	10.2	9.7	9.8	9.9	9.6	10.7	11.1%	0.5%
Iceland	-	-	-	-	-	-	-	-	-	-
Republic of Ireland	2.2	2.3	2.7	2.8	2.8	3.0	3.4	3.6	4.3%	0.2%
Italy	40.8	44.9	46.4	47.9	51.5	56.0	58.4	58.0	-0.6%	2.7%
Netherlands	33.2	34.0	37.5	35.2	34.9	34.1	35.3	35.3	0.2%	1.6%
Norway	2.6	2.7	2.9	3.3	3.4	3.2	3.6	4.0	10.6%	0.2%
Poland	8.2	8.9	9.5	9.4	9.5	9.3	10.0	10.2	2.7%	0.5%
Portugal	-	-	-	0.1	0.7	2.0	2.1	2.3	7.6	0.1%
Romania	21.8	21.6	21.8	1.0	16.8	15.5	15.4	15.8	2.3%	0.7%
Slovakia	4.5	5.1	5.5	5.6	5.7	5.8	5.8	6.7	14.3%	0.3%
Spain	6.5	7.5	8.4	11.1	11.8	13.5	15.2	16.4	7.7%	0.8%
Sweden	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	4.8%	▲
Switzerland	2.0	2.2	2.4	2.3	2.4	2.4	2.4	2.5	4.2%	0.1%
Turkey	5.9	6.2	8.1	8.5	8.9	10.8	12.7	14.0	9.7%	0.6%
United Kingdom	59.5	63.5	73.9	75.4	78.5	83.2	86.4	85.9	-0.6%	4.0%
Other Europe	3.6	3.8	5.4	5.5	5.3	4.8	5.1	5.5	7.8%	0.3%
Total Europe	**319.2**	**342.9**	**380.5**	**374.6**	**386.1**	**399.9**	**412.9**	**423.0**	**2.4%**	**19.5%**
Azerbaijan	7.3	7.2	5.3	5.0	4.7	5.0	4.9	7.6	55.2%	0.3%
Belarus	12.3	11.1	11.7	13.3	13.5	13.8	14.6	14.5	-0.6%	0.7%
Kazakhstan	9.2	9.7	8.1	6.4	6.5	7.1	8.7	9.1	3.8%	0.4%
Lithuania	1.8	2.1	2.3	2.4	2.1	2.2	2.5	2.5	3.8%	0.1%
Russian Federation	351.8	340.0	341.9	315.3	328.3	327.3	339.5	335.4	-1.2%	15.5%
Turkmenistan	9.2	7.2	9.0	9.1	9.2	10.2	11.3	11.6	2.2%	0.5%
Ukraine	73.2	68.6	74.2	66.8	61.9	63.6	61.6	59.2	-4.0%	2.7%
Uzbekistan	37.2	38.1	39.0	40.9	42.3	44.3	42.4	46.0	8.5%	2.1%
Other Former Soviet Union	8.4	8.2	7.1	7.9	8.3	7.1	6.8	7.7	13.4%	0.4%
Total Fomer Soviet Union	**510.4**	**492.2**	**496.6**	**467.1**	**476.8**	**480.6**	**492.3**	**493.6**	**0.3%**	**22.8%**
Iran	28.6	31.7	35.0	42.4	46.6	53.8	56.7	58.5	3.2%	2.7%
Kuwait	5.4	8.4	8.4	8.3	8.5	7.8	8.6	8.6	-1.0%	0.4%
Qatar	12.2	12.2	12.3	13.2	13.3	12.6	13.6	14.4	6.0%	0.7%
Saudi Arabia	38.5	38.6	40.0	40.8	42.1	41.6	44.8	48.3	7.8%	2.2%
United Arab Emirates	19.5	22.3	24.4	26.1	27.4	28.3	29.6	30.8	4.2%	1.4%
Other Middle East	13.4	14.5	15.6	17.7	18.5	19.4	20.1	20.7	2.9%	1.0%
Total Middle East	**117.6**	**127.7**	**135.7**	**148.5**	**156.4**	**163.5**	**173.4**	**181.3**	**4.5%**	**8.4%**

Contd. . . . .

XIV.5 WORLD CONSUMPTION OF NATURAL GAS 1994-2001 (Contd.)

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over	%Share of toal
Algeria	17.6	18.9	19.3	18.1	18.8	19.1	18.9	19.4	2.7%	0.9%
Egypt	9.4	9.9	10.2	10.4	10.8	12.9	16.5	18.9	14.4%	0.9%
South Africa	-	-	-	-	-	-	-	-	-	-
Other Africa	10.7	11.5	12.9	12.9	13.4	13.1	14.6	15.8	8.4%	0.7%
Total Africa	**37.7**	**40.3**	**42.4**	**41.4**	**43.0**	**45.1**	**50.0**	**54.1**	**8.2%**	**2.5%**
Australia	17.5	17.6	17.9	17.6	18.3	17.8	19.1	20.3	6.0%	0.9%
Bangladesh	6.0	6.6	6.8	6.8	7.0	7.5	9.0	9.7	8.2%	0.4%
China	14.9	15.9	15.9	17.4	17.4	19.3	22.1	24.9	12.9%	1.2%
China Hong Kong SAR	-	†	1.5	2.4	2.2	2.4	2.2	2.2	0.9%	0.1%
India	15.7	17.7	18.5	19.1	21.8	22.3	23.4	23.7	1.3%	1.1%
Indonesia	24.6	27.0	28.2	28.7	25.0	28.7	27.5	26.7	-2.9%	1.2%
Japan	54.3	55.0	59.5	58.6	62.5	67.1	68.6	71.1	3.7%	3.3%
Malaysia	12.3	12.4	14.3	15.0	15.7	16.7	18.3	19.4	6.2%	0.9%
New Zealand	4.0	3.7	4.3	4.6	4.0	4.7	4.9	5.2	5.1%	0.2%
Pakistan	12.0	13.1	13.8	14.0	14.4	15.6	17.0	18.1	6.1%	0.8%
Philippines	†	†	†	†	†	†	†	0.1	100.0%	▲
Singapore	1.4	1.4	1.4	1.4	1.4	1.4	1.6	2.3	43.3%	0.1%
South Korea	7.6	9.2	12.2	14.8	13.8	16.8	18.9	20.8	9.8%	1.0%
Taiwan	3.6	3.9	4.0	4.6	5.7	5.6	6.2	6.8	9.7%	0.3%
Thailand	8.6	9.0	10.7	13.1	14.3	15.6	18.4	19.0	3.0%	0.9%
Other Asia Pacific	2.9	3.0	3.4	3.8	4.1	4.4	4.4	4.4	0.2%	0.2%
Total Asia Pacific	**185.4**	**195.**	**212.4**	**221.9**	**227.6**	**245.9**	**261.6**	**274.7**	**5.0%**	**12.7%**
Total world	**1857.5**	**1913.5**	**2004.0**	**1992.0**	**2016.9**	**2069.2**	**2157.5**	**2164.3**	**0.%**	**100.0%**
of which: European Union 15	252.8	272.2	302.5	300.9	313.5	327.8	338.2	343.3	1.5%	15.9%
OECD	1000.3	1047.5	1105.9	1106.6	1106.5	1138.7	1184.9	1167.2	-1.5%	53.9%
Former Soviet Union	510.4	492.2	498.6	467.1	476.8	480.6	492.3	493.6	0.3%	22.8%
Other EMEs	346.8	373.8	399.5	418.3	433.6	449.9	480.3	503.5	4.8%	23.3%

†Less than 0.05 — = Nil
▲ Less than 0.05%

Note: The difference between these world consumption figures and the world production statistics on page 23 is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement or conversion of gas supply and demand data.

Source: BP Amoco Statistical Review of World Energy -2002

XIV. 6 PRODUCTIVITY OF PRODUCING WELLS IN OPEC MEMBER COUNTRIES-2001 (AS AT YEAR END)

Country	Average Depth (Feet)	Wells			AV-Daily production (ooo'bbl)	t/w/d (6)/(5)
		Flowing	Artificial Lift	Total		
1	2	3	4	5	6	7
Algeria	11,155	967	317	1284	776.6	82.5
Indonesia	3324	1465	7685	9150	1214.2	18.1
I.R. Iran	9229	na	-	na	3572.0	na
Iraq	na	na	na	na	2593.7	na
Kuwait	7580	805	-	805	1947.0	330.0
Sp. Libyan A.J.	7600	1004	541	1545	1323.5	116.9
Nigeria	9000	2030	400	2430	2017.6	113.3
Qatar	9165	307	135	442	632.9	195.3
Saudi Arabia	8100	1480	95	1575	7888.9	683.3
U.A.E.	9150	1063	347	1410	2114.2	204.5
Venezuela	6531	665	14322	14987	2791.9	25.4
Total OPEC	7939	10004	24239	34243	26872.5	107.1
Total World	5212	**49816**	843422	893238	**74493.0**	11.4

t/w/d=Tonne/Well/Day
n.a.=Not Available
- = Negligible
Source: OPEC Annual Statistical Bulletin,2001

XIV. 7 WORLD OIL REFINING CAPACITY AT END 1994-2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change 2001over 2000	%Share of total 2001
USA	746	766	763	767	780	822	826	835	1.3	20.5
Canada	91	91	89	90	89	93	93	92	0.1	2.3
Mexico	72	72	72	72	72	72	74	72	(-) 1.6	1.8
Total North America	**909**	**929**	**924**	**928**	**941**	**987**	**992**	**1000**	**1.0**	**24.5**
Argentina	35	33	33	33	33	33	33	33	-	0.8
Brazil	71	73	74	73	86	88	88	88	-	2.2
Netherlands Antilles & Aruba	23	24	25	26	27	27	27	29	10.3	0.7
Trinidad & Tobago	13	13	13	8	8	8	8	8	-	0.2
Venezuela	59	59	59	59	64	59	59	59	-	1.4
Other S. & Cent. America	103	101	106	106	107	103	103	103	(-) 0.5	2.5
Total S & Cent. America	**303**	**302**	**309**	**305**	**325**	**318**	**318**	**319**	**0.7**	**7.8**
Belgium	34	34	34	34	35	36	38	39	1.0	0.9
France	84	84	86	87	93	96	99	97	(-) 1.2	2.4
Germany	112	113	105	104	108	111	113	113	0.5	2.8
Greece	18	18	18	18	18	18	21	21	1.2	0.5
Italy	117	117	118	117	117	114	114	114	-	2.8
Netherlands	59	59	59	58	59	60	60	61	1.7	1.5
Norway	16	16	15	14	15	17	16	15	(-) 4.1	0.4
Portugal	14	14	14	14	14	14	14	14	-	0.4
Spain	62	60	60	61	63	62	62	62	-	1.5
Sweden	21	21	21	21	21	21	21	21	-	0.5
Turkey	34	34	34	33	34	32	32	32	-	0.8
United Kingdom	92	93	92	93	91	88	89	88	(-) 0.5	2.2
Other Europe	156	153	154	149	148	139	135	136	1.4	3.3
Total Europe	**818**	**816**	**811**	**806**	**816**	**811**	**813**	**813**	**0.2**	**19.9**
Total Former Soviet Union	**502**	**508**	**514**	**513**	**518**	**4[illegible]**	**434**	**432**	**(-)0.2**	**10.6**
Bahrain	12	12	12	12	12	12	12	12	-	0.3
Iran	54	54	61	66	69	72	72	73	1.7	1.8
Iraq	26	26	26	26	26	32	32	32	0.8	0.8
Kuwait	30	39	39	39	42	45	34	36	4.3	0.9
Saudi Arabia	77	83	83	83	84	90	90	90	0.3	2.2
Other Middle East	50	50	54	55	56	65	73	86	17.8	2.1
Total Middle East	**249**	**265**	**277**	**281**	**290**	**316**	**314**	**329**	**5.2**	**8.1**
Total Africa	**141**	**140**	**141**	**142**	**143**	**145**	**147**	**153**	**4.2**	**3.7**
Australasia	39	39	41	42	44	46	46	46	0.8	1.1
China	166	177	200	210	226	269	269	268	(-) 0.1	6.6
India	53	53	56	60	61	109	110	112	1.9	2.8
Indonesia	39	44	44	44	46	46	53	53	-	1.3
Japan	238	241	249	248	251	254	250	239	(-) 4.3	5.9
Singapore	58	58	63	62	62	62	63	62	-	1.5
South Korea	79	80	86	95	115	115	115	115	-	2.8
Other Asia Pacific	92	99	112	125	125	137	138	140	2.2	3.4
Total Asia Pacific	**764**	**792**	**852**	**887**	**931**	**1038**	**1044**	**1036**	**(-)0.5**	**25.4**
Total World	**3686**	**3752**	**3827**	**3863**	**3964**	**4065**	**4062**	**4081**	**0.7**	**100.0**
Of which: OECD	2003	2031	2035	2050	2096	2156	2171	2164	†	53.0
Other EMEs	1100	1137	1202	1229	1279	1403	1458	1485	2.1	36.4

Source: B.P. Amoco Statistical Review of World Energy 2002
† Less than 0.05%

XIV. 8 WORLD REFINERY CRUDE THROUGHOUT 1994-2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change 2001 over 2000	%Share of total 2001
USA	688	694	730	728	737	735	750	751	0.4	21.6
Canada	78	78	84	84	85	85	88	91	3.3	2.6
Mexico	72	74	72	71	72	69	68	70	2.6	2.0
South & Central America	244	238	261	260	266	271	269	275	2.5	7.9
Europe	713	716	738	737	758	737	746	737	(-) 0.9	21.2
Former Soviet Union	252	243	236	235	222	222	227	243	7.5	7.0
Middle East	244	264	281	280	284	297	280	279	(-) 0.3	8.0
Africa	113	117	121	121	121	120	119	121	2.0	3.5
Australasia	39	39	43	43	43	44	44	44	0.5	1.3
China	127	135	154	153	160	183	210	209	(-)0.2	6.0
Japan	207	207	215	214	209	206	206	204	(-)0.9	5.9
Other Asia Pacific	314	339	407	406	395	414	444	450	1.6	13.0
Total world	**3092**	**3144**	**3342**	**3334**	**3351**	**3382**	**3451**	**3473**	**0.9**	**100.0**
of which: OECD	1842	1858	1969	1964	1982	1964	1994	1986	(-)0.2	57.2
Other EMEs#	965	1007	1105	1102	1113	1166	1230	1244	1.4	35.8

Excludes Central Europe and Former Soviet Union
Source: BP Amoco Statistical Review of World Energy 2002

XIV.9 COUNTRY-WISE WORLD OIL CONSUMPTION *1994-2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over 2001/2000	%Share of total 2001
USA	809.8	807.7	836.5	848.0	863.8	888.9	897.6	895.6	-0.2%	25.5%
Canada	78.4	79.8	82.1	85.2	86.7	87.2	88.1	88.0	-0.1%	2.5%
Maxico	77.8	71.4	73.8	77.3	81.2	80.8	84.1	82.7	-1.7%	2.4%
Total North America	**966.0**	**958.9**	**992.4**	**1010.5**	**1031.7**	**1056.9**	**1069.8**	**1066.3**	**-0.3%**	**30.4%**
Argentina	19.4	19.5	20.4	21.2	22.1	21.0	20.3	19.0	-6.2%	0.5%
Brazil	65.7	69.2	74.1	79.9	83.2	85.7	85.4	85.1	-0.4%	2.4%
Chile	8.8	9.7	10.6	11.4	11.4	11.7	11.8	12.0	2.0%	0.3%
Colombia	11.1	11.8	12.2	12.3	12.0	10.6	10.5	9.9	-5.6	0.3%
Ecuador	5.2	5.1	5.7	6.5	6.6	6.0	5.8	5.9	2.3%	0.2%
Peru	6.2	7.1	7.3	7.2	7.3	7.4	7.3	6.8	-5.8%	0.2%
Venezuela	19.6	20.0	19.0	20.4	21.6	21.3	22.5	22.2	-1.3%	0.6%
Other S. Cent. America	50.2	52.7	53.9	55.3	56.7	57.3	57.4	57.5	0.2%	1.6%
Total S & Cent. America	**186.2**	**195.31**	**203.2**	**214.2**	**20.9**	**221.0**	**221.0**	**218.4**	**-1.1%**	**6.2%**
Austria	11.3	11.3	11.6	11.9	12.3	12.1	11.8	12.4	5.3%	0.4%
Belgium & Luxembourg	27.0	26.4	29.4	30.3	31.6	32.4	33.9	32.3	-4.6%	0.9%
Bulgaria	5.8	5.6	5.5	4.4	4.8	4.5	4.5	4.6	1.5%	0.1%
Czech Republic	7.1	8.0	8.4	8.0	8.3	8.2	7.9	8.3	5.1%	0.2%
Denmark	10.1	10.5	11.4	11.1	10.7	10.6	10.4	10.1	-2.4%	0.3%
Finland	10.4	9.9	10.3	10.2	10.5	10.7	10.7	10.5	-1.5%	0.3%
France	88.2	89.0	91.0	91.7	95.0	96.34	94.9	95.8	0.9%	2.7%
Germany	135.1	135.1	137.4	136.5	136.6	132.4	129.8	131.6	1.4%	3.7%
Greece	16.9	17.6	18.2	18.4	18.2	18.7	19.9	19.4	-2.8%	0.6%
Hungary	8.1	7.7	7.1	7.1	7.4	7.1	6.8	6.8	-1.2%	0.2%
Iceland	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	2.4%	▲
Republic of Ireland	5.6	5.7	6.0	6.6	7.4	8.3	8.2	8.7	6.3%	0.2%
Itlay	92.5	95.5	94.2	94.6	94.7	94.4	93.5	92.8	-0.8%	2.6%
Netherlands	36.4	38.0	37.4	39.5	39.4	40.6	41.7	43.9	5.3%	1.3%
Norway	9.6	9.6	10.1	10.3	10.0	10.1	9.4	9.7	2.9%	0.3%
Poland	14.8	14.9	17.2	18.2	19.9	19.9	20.0	19.0	-4.8%	0.5%
Portugal	12.0	12.9	12.1	13.7	15.1	15.4	14.9	15.2	1.7%	0.4%
Romania	11.2	13.5	13.0	13.7	12.0	9.5	10.0	10.1	1.4%	0.3%
Slovakia	3.3	3.2	3.4	3.4	3.8	3.4	3.4	3.4	-0.9%	0.1%
Spain	53.5	56.3	58.7	62.0	66.4	68.4	70.0	72.7	3.9%	2.1%
Sweden	17.0	16.1	17.4	16.1	16.2	16.1	15.2	15.6	2.5%	0.4%
Switzerland	12.7	11.8	12.2	12.8	13.0	12.6	12.2	13.1	6.9%	0.4%
Turkey	25.8	28.4	29.8	30.3	29.6	29.5	31.6	30.4	-3.9%	0.9%
United Kingdom	82.9	81.9	83.9	81.3	80.9	79.7	77.9	76.1	-2.3%	2.2%
Other Europe	13.0	13.7	15.3	16.4	16.7	16.7	16.3	16.8	2.8%	0.5%
Total Europe	**711.0**	**723.4**	**741.8**	**749.1**	**761.4**	**758.6**	**755.8**	**760.2**	**0.6%**	**21.7%**
Azerbaijan	8.1	8.5	7.0	6.0	7.5	7.4	6.2	4.6	-25.8%	0.1%
Belarus	12.8	12.3	9.3	9.6	8.3	6.9	6.1	5.9	-3.3%	0.2%
Kazakhstan	12.3	12.0	10.2	10.3	8.2	6.6	7.0	7.7	10.0%	0.2%
Lithuania	3.6	3.2	3.3	3.3	3.8	3.1	2.4	2.8	15.9%	0.1%
Russian Federation	162.7	146.1	130.1	129.1	123.7	126.2	123.5	122.3	-1.0%	3.5%
Turkmenistan	3.7	3.9	3.0	3.0	2.8	2.5	2.3	2.4	4.3%	0.1%
Ukraine	19.8	18.9	14.2	13.8	14.3	12.7	12.0	12.7	5.8%	0.4%
Uzbekistan	7.2	6.7	7.4	6.7	7.0	7.1	6.4	6.5	1.6%	0.2%
Other Former Soviet Union	6.1	5.4	4.2	5.0	5.0	4.5	4.4	4.7	7.2%	0.1%
Total Former Soviet Union	**236.3**	**217.0**	**188.7**	**186.8**	**180.6**	**177.0**	**170.3**	**169.6**	**-0.4%**	**4.8%**

Contd. . . . .

XIV.9 COUNTRY-WISE WORLD OIL CONSUMPTION *1994-2001 (Contd.)

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over 2001/2000	%Share of total 2001
Iran	53.4	58.4	60.6	59.0	55.9	57.3	56.1	54.2	-3.4%	1.5%
Kuwait	6.2	6.5	6.3	6.9	9.1	10.3	10.4	10.5	1.6%	0.3%
Qatar	0.9	1.0	1.1	1.1	1.2	1.1	1.2	1.4	19.7%	▲
Saudi Arabia	53.5	51.4	53.7	55.3	58.8	60.9	62.4	62.7	0.5%	1.8%
United Arab Emirates	18.2	18.0	17.8	16.3	11.9	13.0	14.2	14.3	0.6%	0.4%
Other Middle East	54.9	58.1	58.6	61.0	62.6	63.0	63.5	63.3	-0.3%	1.8%
Total Middle East	**187.1**	**193.4**	**198.1**	**199.6**	**199.5**	**205.6**	**207.8**	**206.4**	**-0.6%**	**5.9%**
Algeria	8.7	8.4	8.1	8.0	8.2	8.1	8.5	8.8	3.5%	0.3%
Egypt	21.5	23.3	24.6	26.0	27.3	27.8	27.2	26.2	-3.5%	0.7%
South Africa	18.8	20.1	20.7	21.0	21.3	21.8	22.5	23.0	2.1%	0.7%
other Africa	51.5	51.9	52.7	53.9	55.7	57.4	57.9	59.0	1.9%	1.7%
Total Africa	**100.5**	**103.7**	**106.1.1**	**108.9**	**112.5**	**115.1**	**116.1**	**117.0**	**0.8%**	**3.3%**
Australia	34.0	35.3	35.9	37.0	37.0	38.0	37.7	38.1	1.0%	1.1%
Bangladesh	2.2	2.9	2.9	3.3	3.7	3.4	3.4	3.4	1.0%	0.1%
China	149.5	160.7	174.4	185.6	190.3	207.2	230.1	231.9	0.8%	6.6%
China Hong Kong SAR	8.9	9.5	9.3	9.2	8.8	9.3	9.7	9.5	-2.1%	0.3%
India	67.4	73.0	79.4	83.3	86.8	95.2	97.5	97.1	-0.4%	2.8%
Indonesia	37.0	39.1	42.4	45.9	43.5	46.8	50.4	52.3	3.7%	1.5%
Japan	267.4	267.6	268.8	265.0	253.6	257.3	255.4	2472.2	-3.2%	7.0%
Malaysia	17.4	17.9	19.0	20.2	19.0	20.3	20.4	18.6	-8.8%	0.5%
New Zealand	5.6	5.8	5.9	6.1	6.1	6.3	6.3	6.2	-0.4%	0.2%
Pakistan	14.5	15.8	16.6	17.0	17.6	18.2	18.8	18.9	0.7%	0.5%
Philippines	14.9	16.8	17.5	18.8	19.1	18.0	16.6	16.5	-0.5%	0.5%
Singapore	30.6	32.0	30.3	32.4	33.3	31.6	33.5	36.9	10.2%	1.1%
South Korea	87.0	94.8	101.4	111.4	93.9	100.7	103.2	103.1	-0.1%	2.9%
Taiwan	32.3	34.7	34.8	36.0	37.2	39.9	39.8	37.7	-5.2%	1.1%
Thailand	29.8	34.7	37.5	37.8	35.4	35.4	34.8	33.8	-2.8%	1.0%
Other Asia pacific	14.0	14.7	16.4	17.5	18.2	19.0	20.6	21.5	4.4%	0.6%
Total Asia Pacific	**812.5**	**855.3**	**892.5**	**926.5**	**903.5**	**946.6**	**978.2**	**972.7**	**-0.5%**	**27.7%**
TOTAL WORLD	**3199.6**	**3246.8**	**3322.8**	**3385.6**	**3410.1**	**3480.8**	**3519.0**	**3510.6**	**-02%**	**100.0%**
of which: European Union 15	598.9	606.2	619.0	623.9	635.0	636.2	632.8	637.1	0.7%	18.2%
OECD	2041.0	2053.0	2112.4	2144.6	2150.2	2187.1	21974.4	2189.6	-0.4%	52.4%
Former Soviet Union	236.3	217.0	1021.7	1064.2	1079.3	1116.7	1151.3	1151.4	▲	32.8%

*Island demand plus international aviation and marine bunkers and refinery fuel and loss.

▲ Less than 0.05%

Source: BP Amoco Statistical Review of World Energy-2002

XIV. 10 PRODUCT-WISE REGIONAL CONSUMPTION OF MAIN PETROLEUM PRODUCTS DURING 1994—2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over 2001/2000	%Share of total 2001
Gasolines	388.4	397.5	405.2	412.2	424.1	430.3	503.0	506.4	0.9	43.6
Middle distillates	287.6	287.4	300.7	309.6	312.4	320.9	339.0	336.0	(-)0.6	28.9
Fuel oil	86.6	73.2	74.0	73.9	82.4	77.4	75.6	72.0	(-)4.4	6.2
Others	203.7	197.4	209.1	212.3	209.7	224.0	250.7	246.7	(-)1.4	21.3
Total North America	**966.3**	**955.5**	**989.0**	**1008.0**	**1028.6**	**1052.6**	**1168.4**	**1161.1**	**(-)0.4**	**100.0**
of which: USA										
Gasolines	339.3	345.5	252.6	358.4	369.4	375.3	438.7	441.0	0.8	45.2
Middle distillates	246.3	248.6	259.4	266.5	268.6	276.0	291.3	290.1	(-)0.2	29.8
Fuel oil	55.1	45.8	45.7	42.7	47.7	44.7	44.4	41.2	(-)7.2	4.2
Others	169.1	167.8	178.8	180.4	178.1	192.9	206.3	202.5	(-)1.6	20.8
Total USA	**809.8**	**807.7**	**836.5**	**848.0**	**863.8**	**888.9**	**980.6**	**974.8**	**(-)0.3**	**100.0**
S. Cent America										
Gasolines	48.0	50.1	51.9	54.7	55.1	55.1	68.4	66.8	(-)2.0	28.7
Middle distillates	68.1	71.9	75.1	78.5	82.6	81.9	84.1	84.7	0.9	36.3
Fuel Oil	37.9	38.8	40.4	42.6	43.9	43.2	37.3	36.0	(-)3.2	15.4
Others	33.1	34.0	35.6	36.0	37.5	36.5	45.7	45.5	(-)0.3	19.6
Total S. & Cent America	**187.1**	**194.8**	**203.0**	**211.8**	**219.1**	**216.7**	**235.5**	**233.0**	**(-)0.8**	**100.0**
Europe										
Gasolines	177.8	180.2	181.6	183.1	185.1	186.4	209.9	204.6	(-)2.3	25.6
Middle distillates	284.7	292.4	308.2	310.8	320.5	323.3	334.6	344.5	3.2	43.1
Fuel Oil	124.3	124.4	123.4	120.8	120.0	113.9	98.7	98.4	(-)0.1	12.3
Others	124.7	126.2	127.4	134.0	135.0	134.2	152.0	151.5	+	19.0
Total Europe	**711.5**	**723.2**	**740.6**	**748.7**	**760.6**	**757.8**	**795.2**	**799.0**	**0.7**	**100.0**
Middle East										
Gasolines	30.4	32.7	33.5	35.1	35.9	36.5	41.8	41.9	0.4	19.6
Middle distillates	63.5	68.5	70.8	71.3	71.9	74.0	73.8	75.3	2.2	35.2
Fuel Oil	62.0	62.8	66.0	67.0	69.4	66.0	63.8	61.6	(-)3.1	28.8
Others	27.9	26.4	27.7	28.5	29.8	30.5	35.0	35.0	0.2	16.4
Total Middle East	**183.8**	**190.4**	**198.0**	**201.9**	**207.0**	**207.0**	**214.4**	**213.8**	**+**	**100.0**
Africa										
Gasolines	23.2	23.8	23.8	23.1	24.4	24.8	28.9	29.3	2.1	23.8
Middle distillates	40.4	41.7	43.0	43.9	45.3	47.2	50.1	51.2	2.4	41.5
Fuel Oil	23.2	24.4	25.0	25.9	27.1	27.7	23.6	22.6	(-)3.6	18.3
Others	14.5	14.8	15.1	15.4	15.7	16.2	19.7	20.4	3.8	16.4
Total Africa	**101.3**	**104.7**	**106.9**	**109.3**	**112.5**	**115.9**	**122.2**	**123.6**	**1.4**	**100.0**
Asia Pacific (Incl. China & Japan)										
Gasolines	162.9	175.0	185.1	201.8	210.2	223.5	276.2	274.3	(-)0.4	26.4
Middle distillates	300.8	323.0	344.8	356.8	344.8	366.2	388.2	391.1	1.0	37.7
Fuel Oil	218.1	216.3	215.5	212.3	188.7	193.1	174.5	167.1	(-)4.0	16.1
Others	125.6	135.0	142.6	149.3	152.6	158.7	203.5	205.9	1.4	19.8
Total Asia Pacific	**807.4**	**849.3**	**888.0**	**919.7**	**896.3**	**941.5**	**1042.3**	**1038.5**	**(-)0.1**	**100.0**
China										
Gasolines	30.5	32.3	36.0	40.8	47.1	50.0	65.4	61.8	(-)5.2	24.7
Middle distillates	42.6	48.3	52.5	58.2	61.9	70.5	81.3	84.3	4.0	33.7
Fuel Oil	45.2	45.6	48.5	46.1	35.5	37.8	36.1	36.1	0.4	14.4
Others	31.3	34.4	37.4	40.5	45.7	48.9	65.4	68.1	4.3	27.2
Total China	**149.6**	**160.6**	**174.4**	**185.6**	**190.2**	**207.2**	**248.1**	**250.3**	**1.1**	**100.0**
Japan										
Gasolines	60.1	64.5	65.9	68.6	67.1	70.9	86.4	85.0	(-)1.4	31.5
Middle distillates	92.1	95.3	98.2	96.2	94.2	95.6	97.5	97.2	-	36.1
Fuel Oil	69.7	61.2	57.7	52.7	47.4	46.5	40.0	34.3	(-)14.2	12.7
Others	46.4	47.5	48.1	48.7	46.2	44.3	53.7	53.0	(-)1.1	19.7
Total Japan	**268.3**	**268.5**	**269.9**	**266.2**	**254.9**	**257.3**	**277.5**	**269.5**	**(-)2.7**	**100.0**

XIV. 10 PRODUCT-WISE REGIONAL CONSUMPTION OF MAIN PETROLEUM PRODUCTS DURING 1994—2001

(Million tonnes)

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	%Change over 2001/2000	%Share of toal 2001
World Excl. FSU										
Gasolines	830.7	859.3	881.1	911.1	934.8	956.6	1128.2	1123.4	(-)0.2	31.5
Middle distillates	1045.0	1084.9	1142.6	1170.5	1177.6	1213.5	1269.9	1282.9	1.3	35.9
Fuel Oil	552.1	539.9	544.3	542.5	531.5	521.3	473.4	457.8	(-)3.0	12.8
Others	529.7	533.7	557.4	575.5	580.5	600.1	706.6	705.0	+	19.8
Total World excl. FSU	**2957.5**	**3017.8**	**3125.4**	**3199.6**	**3224.4**	**3291.5**	**3578.0**	**3569.0**	**+**	**100.0**
OECD										
Gasolines	655.5	672.6	685.2	702.6	716.0	728.6	849.6	846.8	(-)0.1	35.9
Middle distillates	698.8	714.0	749.4	760.3	761.1	778.1	809.6	816.1	1.1	34.6
Fuel Oil	299.3	277.8	274.2	266.5	262.2	253.7	230.8	220.5	(-)4.2	9.6
Others	386.0	382.8	397.6	408.8	404.3	417.7	478.7	473.5	(-)0.8	20.1
Total OECD	**2038.6**	**2047.2**	**2106.4**	**2138.2**	**2143.6**	**2178.1**	**2368.3**	**2356.9**	**(-)0.2**	**100.0**
European Union 15										
Gasolines	151.2	152.2	153.1	153.5	154.9	155.4	176.5	171.7	(-)2.5	25.7
Middle distillates	244.5	250.6	264.0	266.7	274.7	278.5	289.3	279.9	3.2	44.5
Fuel Oil	97.9	97.6	95.9	92.8	94.4	90.3	77.3	76.1	(-)1.2	11.4
Others	105.7	105.7	105.9	110.0	111.0	111.6	121.4	123.0	1.5	18.4
Total European Union 15	**599.3**	**606.1**	**618.9**	**623.0**	**635.0**	**635.8**	**664.5**	**668.7**	**0.9**	**100.0**
Others EMEs										
Gasolines	168.4	179.0	188.2	200.3	210.6	219.8	278.5	276.6	(-)0.4	22.8
Middle distillates	337.1	361.0	382.4	399.3	405.5	425.3	460.7	466.8	1.7	38.5
Fuel Oil	241.1	249.7	257.6	263.6	258.1	257.7	242.6	237.3	(-)1.9	19.6
Others	138.0	145.0	154.4	159.9	170.0	177.1	227.8	231.5	1.8	19.1
Total EMEs#	**884.6**	**934.7**	**982.6**	**1023.1**	**1044.2**	**1079.9**	**1209.3**	**1212.1**	**0.5**	**100.0**

Excludes Central Europe and Former Soviet Union

Gasolines' consists of aviation and moter gasolines and light distillate feedstock (LDF).

Middle distillates' consists of jet and heating kerosines, and gas and diesel oils (including maarine bunkers).

'Others' consists of refinery gas, LPGs, solvents, petroleum coke, lubricants, bitumen, wax and refinery fuel and loss.

Source: B.P. Amoco Statistical Review of World Energy, June 2002.

XIV. 11 WORLD OIL PRODUCTION, CONSUMPTION AND RELATIVE DEFICIT/SURPLUS IN EACH COUNTRY/REGION DURING 2000 AND 2001

(Million Tonnes)

Country/Region	2000				2001			
	Produc-tion	Consupm-tion	Deficit/ Surplus	%extent of depen-dence	Produc-tion	Consump-tion	Deficit/ Surplus	%extent of depen-dence
1	2	3	4	5	6	7	8	9
North America	657.4	1066.3	(-)408.9	(-)38.3	650.8	1069.8	(-)419.0	(-)39.2
S. & Cent America	354.0	218.4	135.6	62.1	349.6	221.0	128.6	58.2
Middle East	1075.6	206.4	869.2	421.1	1115.8	207.8	908.0	437.0
Africa	370.7	117.0	253.7	216.8	370.9	116.1	254.8	219.5
Asia Pacific	379.4	972.7	(-)593.3	(-)61.0	382.9	978.2	(-)595.3	(-)60.9
of which India	36.1	97.1	(-)61.0	(-)62.8	36.1	97.5	(-)61.4	(-)63.0
Japan	N.A.	247.2	NA	NA	NA	255.4	NA	NA
China	164.9	231.9	(-)67.0	(-)28.9	162.6	230.1	(-)67.5	(-)29.3
Australia	31.8	38.1	(-)6.3	(-)16.5	35.4	37.7	(-)2.3	(-)6.1
OECD	1006.9	2189.6	(-)1182.7	(-)54.0	1011.9	2197.4	(-) 1185.5	(-)54.0
Europe	323.7	760.2	(-) 436.5	(-)57.4	331.8	755.8	(-)424.0	(-)56.1
Former Soviet Union	424.2	169.6	254.6	150.1	393.3	170.3	223.0	130.9
Total World	**3584.9**	**3510.6**	**74.3**	**2.1**	**3585.0**	**3519.0**	**66.0**	**1.9**

Source: BP Amoco Statistical Review of World Energy June 2002
NA = Not available

XIV. 12 WORLD CRUDE OIL AND PETROLEUM PRODUCTS IMPORTS AND EXPORTS 2001

COUNTRY/AREA	IMPORTS		EXPORTS		IMPORTS		EXPORTS	
	Crude	Products	Crude	Produces	Crude	Products	Crude	Products
	(Million Tonnes)				(Thousand barrels daily)			
1	2	3	4	5	6	7	8	
USA	455.4	118.3	1.9	41.7	9145	2473	38	872
Canada	47.0	9.8	65.9	23.0	944	205	1323	481
Mexico	-	16.0	90.8	2.8	-	334	1823	59
South & Central America	44.6	9.7	105.2	49.3	896	203	2113	1031
Europe	464.6	105.3	54.8	40.5	9330	2201	1101	847
Former Soviet Union	-	5.5	159.5	70.6	-	115	3203	1476
Middle East	4.2	4.4	838.7	107.9	84	92	16843	2256
North Africa	8.1	5.1	98.7	35.5	163	107	1982	742
West Africa	2.6	8.1	154.7	3.6	52	169	3107	75
East & Southern Africa	26.5	5.1	7.1	0.2	532	107	143	4
Australasia	26.1	4.4	16.2	5.0	524	92	325	105
China	60.3	28.0	6.6	7.9	1211	585	133	165
Japan	212.0	45.2	-	4.5	4257	945	-	94
Other Asia Pacific	332.6	90.4	48.4	56.4	6679	1890	972	1179
Unidentified*	-	-	35.5	26.4	-	418	713	552
Total World	**1684.0**	**475.3**	**1684.0**	**475.3**	**33818**	**9936**	**33818**	**9936**

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use etc.
Note: Bunkers are not included as exports. Intra-area movements (for example, between countries in Western Europe) are excluded.
Source: B.P. Amoco Statistical Review of World Energy, 2002.

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

(Million Tonnes)

Counry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001(P)
1	2	3	4	5	6	7	8	9	10	11
				CRUDE OIL						
Algeria	13.9	15.3	16.4	16.6	19.5	18.5	20.3	20.6	23.0	21.9
Indonesia	32.6	33.9	39.5	37.0	35.2	35.4	33.7	38.9	31.0	29.8
Iran IR	126.2	129.5	132.0	130.5	131.0	112.9	112.5	114.1	124.1	121.4
Iraq	3.0	2.9	3.0	3.2	4.4	36.7	76.2	106.1	101.5	84.9
Kuwait	34.7	71.7	62.9	59.1	62.7	56.4	59.2	47.2	61.2	60.3
Libya	58.7	55.3	56.0	54.9	55.7	54.0	56.6	49.4	50.0	49.0
Nigeria	78.9	77.5	79.2	82.9	84.6	87.0	76.9	84.9	98.9	103.7
Qatar	18.1	17.0	16.1	16.6	18.3	23.1	28.5	28.9	30.7	30.1
Saudi Arabia	328.6	313.4	310.4	313.2	304.2	308.0	318.2	284.8	311.3	299.7
U.A.E.	102.9	98.1	97.3	95.9	96.8	97.0	101.2	95.6	90.3	88.7
Venezuela	71.4	76.7	84.5	90.6	98.4	110.1	117.7	95.8	99.7	97.5
Total	**869.0**	**891.3**	**897.3**	**900.5**	**910.8**	**839.1**	**895.0**	**966.3**	**1021.7**	**987.1**
				REFINED PETROLEUM PRODUCTS						
Algeria	20.9	18.7	19.1	19.7	20.2	23.0	23.0	29.8	27.1	27.6
Indonesia	12.7	11.8	12.4	14.6	14.8	12.9	10.9	9.6	9.4	9.7
Iran. IR	3.5	3.5	3.7	5.5	4.5	4.8	11.7	13.6	17.3	15.3
Iraq	0.8	0.9	1.0	0.9	1.0	1.0	1.0	1.1	1.1	1.2
Kuwait	12.8	20.9	31.0	39.5	35.7	42.2	4.5	41.8	33.6	31.9
Libya	8.5	7.1	6.5	6.1	5.6	7.1	6.8	10.0	11.8	11.2
Nigeria	1.5	1.6	1.2	1.0	1.1	1.2	0.9	0.5	0.9	2.3
Qatar	5.2	5.8	5.1	4.9	5.3	6.2	4.7	3.7	3.7	3.9
Saudi Arabia	64.3	69.0	67.7	65.8	74.3	69.3	68.1	63.7	61.1	53.8
U.A.E.	8.6	8.0	7.7	13.4	13.5	16.1	15.8	16.5	19.5	19.8
Venezuela	30.7	31.6	31.5	34.3	36.9	41.9	42.1	41.2	38.8	37.8
Total	**169.5**	**178.9**	**186.9**	**205.7**	**212.9**	**225.7**	**189.5**	**231.5**	**224.3**	**214.4**

Note: Ecuador and Gabon withdraw their membership fo OPEC
Source: OPEC Annual Statistical Bulletin, 2001
(P)= Provisional.

XIV. 14 CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS 1992-2001

Import Region	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001(P)
1	2	3	4	5	6	7	8	9	10	11
North America	176.5	189.8	187.6	183.1	185.4	212.0	236.5	221.8	238.8	245.6
of which USA	172.2	182.0	177.0	171.3	174.0	199.2	222.2	209.0	224.8	230.4
Latin America	43.0	38.9	40.7	33.6	40.0	35.2	37.3	41.1	45.5	46.4
Western Europe	278.4	279.6	262.3	253.6	252.1	264.3	292.4	248.0	254.5	220.8
Of which:										
France	44.5	52.4	44.4	44.0	42.2	42.7	49.9	41.1	40.1	35.7
Germany	36.9	31.2	37.1	29.8	28.8	27.3	28.0	23.8	24.9	20.8
Italy	56.9	55.8	46.8	49.4	53.8	60.2	64.0	50.2	60.3	51.0
U.K.	13.5	17.3	11.5	10.1	9.2	6.6	7.3	4.3	3.8	4.1
Middle East	15.4	14.8	15.6	15.1	15.6	15.3	15.7	14.6	13.5	13.6
Africa	14.1	14.0	14.7	25.2	23.6	26.1	27.9	27.8	31.0	29.7
Asia and Far East	331.3	346.7	358.7	369.9	371.3	380.5	377.8	393.3	411.7	406.1
Of which:										
Japan	162.6	169.3	179.2	179.2	177.2	186.5	177.5	175.0	174.8	177.8
Oceania	8.4	10.6	9.2	9.6	10.8	10.6	12.8	NA	NA	NA
Eastern Europe	12.0	7.1	8.7	9.8	9.2	11.7	13.8	9.0	10.2	7.9
Unspecified	-	5.0	-	0.5	2.8	0.3	0.8	10.5	16.5	17.0
OECD Area	635.0	662.3	631.4	570.3	618.1	663.2	721.3	NA	NA	NA
Total World	**879.1**	**906.1**	**897.2**	**900.5**	**910.7**	**955.8**	**1015.2**	**966.2**	**1021.7**	**987.1**

Source: OPEC Annual Statistical Bulletin 2001
Note: Figures Converted into million tonees using conversion factor: 1 barrel=0.136 Metric tonnes
NA=Nil or Negligible (P): Provisional

XIV. 15 CRUDE OIL EXPORTS FROM OPEC MEMBER COUNTRIES BY DESTINATION DURING 2001

(000' bbi/Day)

Destination/Country	Algeria	Indonesia	IR Iran	Iraq	Kuwait	Libya	Nigeria	Qatar	Saudia Arabia	UAE	Venezuala
1	2	3	4	5	6	7	8	9	10	11	12
North America	85.2	40.0	-	922.5	238.5	-	868.7	0.2	1534.4	19.61	236.7
Latin America	11.3	-	60.0	-	-	13.7	151.9	-	100.7	-	611.2
Eastern Europe	-	-	110.0	35.0	-	-	-	-	-	-	-
Western Europe	318.1	-	843.2	398.6	159.3	963.9	534.2	-	1112.0	6.1	112.8
Middle East	-	1.3	30.0	85.0	-	-	-	-	157.4	-	-
Africa	-	-	200.0	-	25.0	10.0	149.0	-	177.0	37.0	
Asia and Far East	26.8	532.6	1202.8	47.3	739.4	-	385.7	561.5	2954.4	1724.0	4.0
Oceania	-	-	-	-	-	-	-	-	-	-	-
Unspecified	-	25.4	-	221.8	52.0	-	-	43.8	-	-	-
OECD Area	-	-	-	-	-	-	-	-	-	-	-
Total World	**441.5**	**599.2**	**2446.0**	**1710.2**	**1214.1**	**987.6**	**2089.4**	**605.5**	**6035.9**	**1786.7**	**1964.7**

Source: OPEC Annual Statisfical Bulletin 2001
- = Nil or Negligible

XIV. 16 VALUE OF PETROLEUM EXPROTS FROM OPEC MEMBER COUNTRIES DURING 1993-2001

(Billion US$)

Countries	1993	1994	1995	1996	1997	1998	1999	2000	2001
1	2	3	4	5	6	7	8	9	10
Algeria	6.90	6.36	6.90	9.16	8.35	5.69	7.55	12.92	11.79
Indonesia	5.69	6.00	6.44	7.87	7.24	4.60	6.58	10.94	8.94
Iran	14.25	14.80	14.94	17.96	17.66	11.10	16.09	25.44	21.42
Iraq	0.42	0.42	0.46	0.68	4.28	5.11	12.10	18.15	12.68
Kuwait	9.70	10.48	12.05	14.09	13.46	8.96	10.99	19.20	14.98
Libya	7.69	7.17	7.76	9.54	8.90	5.61	7.73	13.25	10.88
Nigeria	10.85	11.04	11.51	14.88	15.84	9.84	12.45	20.04	17.19
Qatar	2.81	2.62	2.98	3.80	4.65	3.17	4.77	7.83	6.96
Saudi Arabia	38.62	38.12	42.50	50.04	52.12	33.39	44.93	74.59	62.98
U.A.E.	12.11	11.68	12.82	14.98	15.26	11.13	15.02	26.15	22.41
Venezuela	11.03	11.47	13.73	18.52	18.18	11.51	16.46	25.60	20.30
Total	**120.07**	**120.16**	**132.09**	**161.52**	**165.94**	**110.14**	**154.71**	**254.10**	**210.53**

Data for some countries may include exprot of condensates and other NGLs.
Source: OPEC Annual Statistical Bulletin 2001

XIV. 17 SPOT PRICE OF KEY OPEC CRUDE SINCE 1990

(US$ bbl)

Period	Country/Crude Name													
	Kuwait	Libyan	Nigeria	Qatar	Saudi Arabia		UAE	Venezuela	Indonesia	Iran		Iraq		Oman
	Kuwait Exp.	Brega	Forcados	Dukhan	Arab Medium	Arab Heavy	Murban	T.J. Medium	Attacka	IranLight	Iran Heavy	Basrah	Kirkuk	Oman
	31.4/2.6	40.4/0/2	41.4/1.1	41.4/1.1	30.3/2.4	28.0/3.0	39.4/0.8	24.0/0.85	42.3/0.09	33.9/1.4	31.0/1.6	34.0/2.0	36.1/2.1	36.3/0.79
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	15.83	20.68	17.34	16.33	-	-	17.14
1992	-	19.84	19.61	18.49	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	14.32	18.10	15.06	14.08	-	-	15.77
1994	14.14	15.88	16.20	15.82	14.41	13.65	16.21	14.34	16.48	14.84	14.56	-	-	15.21
1995	15.90	17.21	17.26	16.73	16.09	15.58	17.18	15.91	17.82	16.17	16.26	-	-	16.34
1996	18.41	21.06	21.21	19.46	19.01	18.44	20.30	19.48	21.53	19.03	18.49	-	-	19.12
1997	17.81	19.36	19.29	18.99	17.97	17.17	19.59	-	20.35	18.24	18.00	-	-	18.52
1998	11.26	12.90	12.62	12.55	11.53	10.90	12.67	-	13.53	11.97	11.45	10.77	10.79	12.06
1999	16.75	18.08	17.93	17.65	16.95	16.44	17.89	-	17.94	17.25	16.93	16.28	16.43	17.27
2000	25.78	28.65	28.40	26.95	25.99	25.24	27.75	-	29.54	26.75	26.02	24.82	25.17	26.50
2001	21.37	24.70	24.24	23.74	22.60	21.90	24.02	-	26.30	22.90	21.67	20.00	20.07	22.75
Jan.	21.08	25.93	25.30	23.61	21.83	20.74	24.24	-	26.30	22.63	21.38	20.59	21.77	22.43
Feb.	23.10	27.79	27.03	25.66	24.56	23.32	25.90	-	-	24.65	23.40	21.57	21.72	24.29
Mar.	22.03	24.69	23.70	24.24	23.24	22.57	24.58	-	-	23.58	22.33	20.26	19.21	23.26
Apr.	22.50	25.54	24.82	24.87	23.89	23.15	25.15	-	-	24.05	22.80	21.32	20.90	23.82
May	24.03	28.85	28.02	26.82	25.52	24.60	26.80	-	-	25.58	24.33	22.47	23.10	25.55
June	24.25	28.18	27.80	26.68	25.61	24.88	26.90	-	-	25.80	24.55	22.31	21.83	25.53
July	22.47	24.96	24.46	24.63	23.30	22.61	24.92	-	-	23.78	22.73	21.21	20.81	23.61
Aug.	23.13	25.73	25.49	25.39	24.28	23.77	25.58	-	-	24.68	23.43	22.29	22.30	24.44
Sep.	22.99	25.91	25.78	25.31	24.15	23.63	25.54	-	-	24.54	23.29	20.66	21.20	24.69
Oct.	18.49	20.62	20.55	20.52	19.63	19.36	20.90	-	-	20.04	18.79	17.04	17.23	19.93
Nov.	16.09	19.00	18.87	18.29	17.35	17.00	18.62	-	-	17.64	16.39	14.73	15.33	17.67
Dec.	16.14	18.81	18.71	18.74	17.81	17.21	18.92	-	-	17.69	16.44	15.60	15.43	17.87

Notes: The number below crude names indicate the API gravities content in weight percentage, T.J. Medium Quotations are posted prices
Source: OPEC Annual Statistical Bulletin 2001.
-: not available.

XIV. 18 CRUDE OIL SPOT PRICES IN US$/BBL

(Average Unit Value, FOB)

Crude	Country	1993	1994	1995	1996	1997	1998	1999	2000	2001
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Brent	U.K	17.00	15.81	17.03	20.66	19.12	12.76	17.85	28.39	24.46
WTI	U.S.A.	18.44	17.20	18.41	21.77	20.62	14.40	19.25	30.30	25.89
WTS	U.S.A.	16.86	16.27	17.41	20.91	18.81	12.84	17.95	28.29	23.17
Louisiana Light	Lousiana	18.55	17.25	18.59	22.34	20.73	14.20	19.03	30.45	25.95
Dubai	UAE	14.92	14.75	16.10	18.57	18.15	12.18	17.20	26.15	22.81
Iranian Light	Iran	15.38	15.13	16.35	20.04	17.78	11.27	16.57	26.64	22.61
Iranian Heavy	Iran	14.48	14.74	15.94	19.40	17.32	10.82	16.13	26.05	22.08
Urals	Russia	15.39	15.23	16.52	20.81	18.33	11.83	17.18	26.97	23.12
Minas	Indonesia	17.89	16.20	17.63	20.63	19.30	12.36	17.79	28.75	24.06
Topis	Malaysia	18.85	17.74	18.28	21.53	21.00	13.84	18.84	29.74	25.33

XIV. 19 PETROLEUM PRODUCT SPOT PRICES IN US$/BBL

(Average Unit Value, FOB)

Product	1993	1994	1995	1996	1997	1998	1999	2000	2001
					NW DUROPE				
Gasoline	20.93	18.89	20.01	23.22	23.33	16.76	20.80	34.27	28.91
Gas Oil	22.28	19.81	20.47	25.74	23.39	16.19	20.06	34.28	29.15
Jet/Kero	23.36	20.95	21.60	27.05	24.58	17.16	21.99	36.89	30.82
Naphtha	18.47	17.30	18.15	21.70	21.43	14.64	18.28	28.97	23.73
LSFO	13.50	14.00	15.76	17.52	15.47	11.73	15.02	23.66	19.54
HSFO	10.22	13.01	14.82	16.30	14.59	10.20	14.31	21.33	17.80
					U.S.A				
Gasoline	21.58	20.53	22.58	25.81	25.22	17.80	22.69	39.95	30.96
Gas Oil	22.03	20.69	20.72	26.35	23.64	16.43	20.46	36.41	29.78
Jet/Kero	23.31	22.20	21.76	27.57	24.58	18.03	21.74	38.10	31.12
Naphtha	--	--	--	--	--	--	--	--	--
LSFO	14.64	15.05	16.06	19.22	16.91	12.32	15.45	25.03	20.68
HSFO	11.22	12.24	14.47	16.03	15.26	10.25	13.94	20.65	17.35
					Singapore				
Gasoline	24.02	21.09	22.14	23.58	24.57	17.19	21.02	32.51	27.50
Gas Oil	24.02	20.88	21.61	27.07	24.28	15.47	19.13	32.44	27.29
Jet/Kero	23.31	22.20	21.76	27.57	24.58	18.03	21.43	34.27	28.31
Naphtha	17.22	16.35	17.54	20.22	21.93	14.84	19.37	28.28	23.78
LADO	14.86	13.35	14.55	17.95	16.93	10.98	15.49	25.73	21.83
HSFO	10.81	12.37	14.30	15.90	15.10	10.09	15.47	24.12	20.37

..=Not Available

Source: Energy Prices and Taxes, 2nd Quarter 2002, International Energy Agency Publication

XIV. 20 NATURAL GAS PRICES IN INDUSTRIAL/DEVELOPED COUNTRIES

US$/$10^7$ Kl. Cal (GCV)

Country	1993	1994	1995	1996	1997	1998	1999	2000	2001
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. FOR INDUSTRIAL USE									
Australia	12.14	127.2	132.4	144.9	135.8	na	na	na	na
Austria	149.6	151.9	171.9	172.0	135.8	154.6	na	na	na
Belgium	129.3	124.3	141.5	132.6	131.3	na	na	na	na
Canada	74.7	78.5	69.8	71.1	72.5	70.6	79.4	89.8	na
czech Republic	131.4	137.2	157.5	164.1	152.2	159.8	142.8	147.6	155.9
Finland	105.4	120.2	145.9	148.7	143.7	138.5	128.1	130.7	126.0
France	142.8	141.8	161.0	161.9	152.8	145.4	135.3	167.8	187.1
Germany	187.3	184.7	207.1	201.6	189.9	177.7	161.6	187.9	na
Hungary	127.9	111.9	105.6	105.8	145.0	144.8	134.9	154.6	158.5
Ireland	291.9	296.4	318.3	317.8	300.6	171.5	164.9	145.0	170.5
Italy	150.1	157.5	173.7	197.9	191.9	171.3	na	na	na
Japan	464.9	466.2	490.4	423.1	463.3	356.0	385.8	452.7	na
Mexico	99.9	87.6	70.2	102.7	114.2	81.4	88.3	150.0	168.8
Netherlands	126.4	126.0	158.7	153.0	142.7	133.0	166.5	166.5	175.6
New Zealand	163.6	180.4	203.0	217.0	222.0	209.3	217.4	176.2	162.7
Poland	115.9	115.4	129.7	138.4	130.6	132.0	121.8	133/0	173.3
Spain	127.1	135.5	159.0	168.7	155.8	137.8	131.5	175.4	176.0
Switzerland	265.2	267.7	296.9	272.8	237.5	238.8	214.5	222.9	294.7
Turkey	155.9	140.6	157.6	187.8	199.3	172.3	162.3	175.2	200.2
United Kingdom	137.5	141.6	127.1	92.0	101.8	108.7	106.3	104.6	133.6
United States	113.8	113.8	100.8	129.2	136.2	119.0	118.7	171.3	192.6
OECD Europe	149.6	150.9	166.4	164.2	159.3	150.5	134.6	157.7	na
OECD	130.7	131.3	130.1	143.5	147.6	133.5	129.5	168.6	na
B. FOR HOUSEHOLD USE									
Australia	276.6	312.2	317.9	332.8	332.3	na	na	na	na
Austria	396.3	405.8	459.7	468.3	430.8	415.0	393.3	348.4	368.4
Belgium	406.5	435.3	487.1	451.8	413.5	49.8	383.1	407.7	na
Canada	176.9	175.6	162.2	169.7	170.6	169.8	212.4	199.4	na
Czech Republic	95.4	111.4	125.5	131.6	128.7	177.3	185.1	214.1	233.0
Denmark	641.2	636.9	691.5	739.2	677.6	645.2	654.6	735.1	709.2
Finland	112.4	131.1	177.9	181.4	170.3	169.0	156.2	159.5	221.1
France	456.5	459.6	500.5	470.4	426.5	435.0	384.5	354.5	410.3
Germany	425.3	436.3	476.8	438.9	416.4	404.8	382.2	373.4	na
Hungary	117.0	104.5	137.2	136.3	165.6	202.5	185.0	166.3	182.4
Ireland	432.7	441.0	473.6	472.8	447.7	420.3	435.3	345.8	353.0
Italy	636.1	666.3	667.2	733.2	698.2	691.0	638.8	na	na
Japan	1204.1	1307.9	1410.7	1294.1	1287.8	1068.4	1196.4	1294.1	na
Luxembourg	249.2	261.5	298.0	319.4	296.7	274.5	244.5	275.6	300.2
Netherlands	351.6	366.0	406.2	400.2	393.1	393.6	369.2	259.4	462.5
New Zealand	254.1	297.2	363.4	415.9	437.7	380.2	379.3	322.5	296.6
Poland	153.9	159.5	208.7	236.1	227.7	248.3	240.9	247.5	304.0
Spain	553.8	540.9	609.5	613.4	548.0	533.2	481.0	491.4	507.9
Switzerland	429.0	448.3	537.8	505.7	437.7	439.6	412.2	411.3	490.5
Turkey	263.2	207.8	210.6	209.3	237.5	235.1	225.8	257.8	247.2
United Kingdom	285.4	308.9	328.8	325.7	338.2	330.6	321.0	292.8	286.5
United States	237.2	246.5	244.3	264.3	266.8	262.2	257.2	298.4	369.5
OECD Europe	399.6	411.7	441.0	437.7	423.3	423.0	399.8	328.9	na
OECD	333.4	345.4	361.9	367.2	362.7	359.2	351.7	341.1	na

0.95 tonne of oil approximate 10^7 K. Calories of gas. na=Not Available, GCV=Gross Calorific Value
Source: International Energy Agency's "Energy Prices and Taxes" 2nd Quarter of 2002.

XIV. 21 CRUDE OIL IMPORT COSTS IN US$/BBL

(AVERAGE UNIT VALUE, CIF)

Country	1993	1994	1995	1996	1997	1998	1999	2000	2001
IEA*	16.37	15.65	17.19	20.52	19.11	12.52	17.26	28.00	23.65
IEA Europe	16.14	15.63	17.06	20.67	18.88	12.30	17.32	27.89	23.92
Australia	17.91	16.76	18.53	21.81	21.78	14.60	18.38	30.97	26.61
Belgium	15.84	15.41	16.94	20.53	18.65	11.97	17.33	27.87	24.20
Canada	17.19	16.30	17.76	21.26	20.59	13.15	17.85	29.10	24.87
France	16.05	15.76	17.14	20.82	18.99	12.43	17.45	28.18	24.13
Germany	16.88	15.81	17.07	20.68	19.01	12.48	17.51	28.09	24.15
Greece	15.09	15.17	16.54	20.08	18.45	11.66	16.64	26.95	23.22
Italy	15.87	15.49	16.90	20.53	18.83	12.21	17.10	27.77	23.87
Japan	17.47	16.48	18.02	20.55	20.55	13.68	17.38	28.72	25.01
Netherlands	15.53	15.20	16.92	20.39	18.37	11.98	16.97	27.59	23.48
Spain	15.13$	15.24	16.96	20.45	18.34	11.80	16.99	27.16	23.32
Sweden	16.60	15.81	17.23	20.86	18.90	12.61	17.68	28.13	24.03
Turkey	16.05	15.52	16.78	20.25	18.79	11.99	16.07	26.61	NA
U.K.	16.58	15.83	17.29	21.08	19.32	12.64	18.01	28.45	24.45
USA	15.87	15.06	16.74	20.16	18.34	12.02	17.06	27.54	22.07

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

Source: Energy Prices and Taxes, 2nd Quarter, 2002, International Energy Agency Publication.

XIV. 22 DEVELOPMENT OF SPOT PRICES OF KEY OPEC CRUDE OILS SINCE JANUARY 2000

Year/Month	IR Iran	Kuwait	Nigeria	Saudi Arabia		UAE
	Light 33.9	Export 31.4	Bonny Light 36.7	Light 34.2	Heavy 28.0	Dubai 32.4
2000						
January	24.35	23.70	25.41	24.43	23.08	23.23
February	25.70	24.84	28.36	25.85	24.00	24.77
March	25.87	25.07	27.54	26.02	24.52	24.99
April	22.86	22.29	22.91	22.95	22.00	22.14
May	26.10	25.60	27.87	26.27	25.27	25.69
June	27.99	27.44	29.86	29.09	27.09	27.24
July	27.09	26.39	28.75	27.19	25.99	26.35
August	27.12	26.21	29.06	27.12	25.52	26.79
September	30.45	29.05	32.65	30.60	28.00	30.05
October	30.42	28.87	30.67	30.17	28.21	30.57
November	29.75	28.20	32.86	29.81	27.94	30.25
December	22.66	21.11	25.47	22.65	20.83	22.27
2001						
January	22.63	21.08	25.43	22.31	20.74	22.56
February	24.65	23.10	27.40	24.82	23.32	24.79
March	23.58	22.03	24.35	23.77	22.57	23.67
April	24.05	22.50	25.43	24.24	23.15	24.06
May	25.58	24.03	28.51	25.77	24.60	25.40
June	25.80	24.25	28.06	26.17	24.88	25.86
July	23.78	22.47	24.81	24.03	22.61	23.45
August	24.68	23.13	25.41	24.92	23.77	24.70
September	24.54	22.99	25.98	24.73	23.63	24.37
October	20.04	18.49	20.60	20.16	19.36	19.93
November	17.64	16.09	18.92	17.82	17.00	17.62
December	17.69	16.14	18.78	17.99	17.21	17.60
2002						
January	18.95	18.11	19.65	18.83	18.00	18.54
February	18.95	18.69	20.30	19.47	18.61	19.02
March	22.31	22.74	23.76	23.33	22.51	22.97

Source : OPEC Monthly Bulletins

XIV. 23 DEVELOPMENT OF SPOT PRICES OF MAJOR PETROLEUM PRODUCTS IN KEY TRADING CENTRES OF THE WORLD DURING 2000 AND 2001

(US$/Barrel)

Market/Product	2001					2000				
	Jan.	March	June	Sept.	Dec.	Janu.	March	June	Sept.	Dec.
NAPHTHA:										
North European Market, FOB Rotterdan	27.36	27.19	27.21	23.19	17.48	27.41	31.06	30.41	33.28	29.27
South European Market, FOB Italy	20.35	24.13	27.15	23.46	16.91	26.26	29.65	28.93	31.58	27.74
Caribbean Cargoes	34.10	28.63	25.85	26.30	19.32	28.17	32.74	36.24	35.32	29.73
Singapore Cargoes	25.50	27.43	27.57	24.67	18.36	25.02	29.08	28.13	34.53	25.52
Middle East FOB	24.29	26:28	26.95	24.07	17.61	24.62	28.42	27.63	33.03	24.19
GASOLINE (Premium 0.15g/Litre)										
North European Market, FOB Rotterdan	29.85	31.52	31.73	29.88	19.16	28.23	36.27	44.28	37.70	28.05
South European Market, FOB Italy	28.76	30.53	32.21	29.93	19.11	27.55	36.27	44.06	37.87	27.79
US East Coast, New York (Unl. regular 87)	34.81	32.96	30.07	31.61	21.73	29.41	37.10	40.12	39.90	30.96
Singapore Cargoes	30.02	29.88	26.89	29.47	22.61	28.36	32.58	33.08	35.05	29.97
JET KERO										
North European Market, FOB Rotterdan	31.03	31.72	33.69	32.18	23.11	32.24	34.01	34.40	43.84	37.50
South European Market, FOB Italy	28.73	27.89	29.40	29.36	19.16	31.43	32.31	31.99	41.89	35.99
US East Coast, New York	36.03	32.91	32.92	31.77	22.52	39.42	34.31	33.69	43.80	40.97
Caribbean Cargoes	36.17	30.11	32.13	30.28	21.26	32.85	33.01	32.78	42.78	36.40
Singapore Cargoes	29.70	28.72	30.84	31.05	21.77	31.30	32.37	31.23	42.21	32.92
Middle East FOB	26.38	26.41	28.93	29.64	20.48	29.87	30.79	29.40	40.01	29.73
GAS OIL										
North European Market, FOB Rotterdan	30.15	29.38	31.06	30.87	21.35	28.96	30.28	31.40	42.09	34.25
South European Market, FOB Italy	27.32	27.55	30.98	NA	NA	28.06	29.63	30.14	41.97	34.92
US East Coast, New York	35.51	31.12	31.74	30.71	21.90	34.21	32.01	32.62	41.25	39.52
Caribbean Cargoes	35.56	28.97	31.58	30.10	21.10	30.61	30.82	32.27	41.01	34.63
Singapore Cargoes	28.41	26.83	30.00	29.44	20.11	28.14	32.94	30.69	40.13	29.61
Middle East FOB	25.05	24.31	28.08	28.00	19.33	26.63	31.28	28.76	37.79	26.46
FUEL OIL										
North European (1%s)	20.54	20.56	19.23	19.84	14.98	19.85	22.67	23.79	24.29	23.24
South European (1%s)	20.13	18.39	17.71	18.99	15.15	20.48	22.40	24.50	25.00	23.46
US East Coast, (1%s) New York	25.40	23.31	20.22	20.24	16.52	21.76	21.06	27.11	29.42	25.63
Caribbean Cargoes (2.0%s)	20.21	18.26	16.64	18.70	14.35	19.82	20.17	22.27	23.59	19.89
Singapore Cargoes (0.3%s)	22.54	22.43	25.11	20.38	15.78	21.58	25.85	26.78	28.44	24.45
Singapore Cargoes (180C)	18.37	20.08	20.26	21.74	16.15	19.66	24.66	25.30	24.81	19.78
Middle East FOB (180C)	15.68	17.93	18.92	20.57	14.61	18.47	23.40	23.60	22.98	17.06

Source: Monthly OPEC Bulletin; NA= not reported

XIV. 24 WORLD SURVEY OF SELECTED PETROLEUM PRODUCTS PRICES 2001*

(US$/Litre)

Country	US$ Exchange Rate in National Currencies	Gasoline (Premium Leaded)	Automotive Diesel Oil (Commercial Use)	Heavy Fuel Oil for Industry	Light Fuel Oil	
					For Household Use @	For Industry Use @
1	2	3	4	5	6	7
Australia	1.935	0.465	NA	NA	NA	NA
Austria	1.117	—	0.558	NA	370.7	NA
Belgium	1.117	0.962	0.563	155.1	294.6	243.5
Canada	1.548	—	0.445	164.9	347.3	207.4
Czech Republic	38.02	—	0.520	125.1	339.6	239.7
Denmark	8.321	—	0.668	NA	678.9	353.8
Finland	1.117	—	0.601	NA	358.7	294.0
France	1.117	1.004	0.597	154.4	357.3	270.6
Germany	1.117	—	0.635	NA	333.9	287.9
Greece	1.117	0.706	0.481	NA	449.1	380.6
Hungary	286.5	NA	0.728	128.7	—	582.6
Ireland	1.117	NA	0.611	200.8	399.0	296.2
Italy	1.117	0.979	0.646	197.5	733.7	611.4
Japan	121.5	—	0.542	217.2	409.7	262.5
Korea	129.0	NA	0.500	254.1	449.8	444.9
Luxembourg	1.117	—	0.511	—	283.8	253.4
Mexico	9.344	—	0.442	101.9	NA	233.5
Netherland	1.117	—	0.617	NA	545.3	NA
New Zealand	2.382	—	0.257	258.2	NA	233.2
Norway	8.993	1.134	0.775	NA	595.8	465.0
Poland	4.097	—	0.511	105.4	364.7	251.6
Portugal	1.117	—	0.556	213.7	—	—
Spain	1.117	0.774	0.535	160.9	349.5	301.3
Sweden	10.338	NA	0.669	—	580.9	272.7
Switzerland	1.687	—	0.690	—	274.9	230.5
Turkey	1228300	0.808	0.596	181.1	630.9	NA
U.K.	0.694	—	0.955	177.4	276.4	256.0
USA	1.00	—	0.371	147.6	342.4	199.6

Source: Energy Prices and Taxes 2nd Quarter, 2002, International Energy Agency Publication.

— = not applicable

NA = not available

* = Prices are preliminary

@ = Price in US$/1000 litres.

XIV. 25 POSTED AIRFIELD PRICES OF JET A-1 FUEL AT MAJOR INTERNATIONAL AIRPORTS AS ON 1ST APRIL OF EACH YEAR

(U.S.C./US Gallon)

Countries/Ports	1990	1995	1998	1999	2000	2001	2002*
1	2	3	4	5	6	7	8
Bahrain	N.A.	N.A.	N.A.	N.A.	N.A.	65.75	74.75
France							
Paris	66.24	60.94	54.2	54.2	91.99	86.79	68.3
Germany							
Frankfurt	67.96	62.29	N.A.	N.A.	N.A.	N.A.	N.A.
Netherlands							
Amsterdam	65.22	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Italy							
Rome	68.48	82.03	N.A.	N.A.	N.A.	N.A.	N.A.
Kenya							
Nairobi	N.A.	N.A.	N.A.	N.A.	N.A.	94.14	76.71
Malaysia							
Kualalumpur	N.A.	N.A.	N.A.	N.A.	N.A.	76	59.9
Singapore							
Paya lebar/Chan-gi	63.1	57.87	41.98	46.81	78.23	73.86	60.45
Switzerland							
Geneva	67.93	64.71	N.A.	N.A.	N.A.	N.A.	N.A.
U.A.E.							
Abu Dhabi	N.A.	N.A.	N.A.	N.A.	N.A.	92	82
Dubai	78.11	80	63.5	63	108.25	89.45	78.3
United Kingdom							
London (Heathrow)	66.37	57	47.31	46.98	87.65	83.06	62.42
Kuwait	N.A.	N.A.	N.A.	N.A.	N.A.	85	74
New York (1)	64.98	52.74	49.92	48.29	N.A.	81.63	61.04
Japan							
Tokyo	85.75	72.03	60.58	64.48	100.7	81.02	71.02
India							
Mumbai	89.59	93	81.6	75.6	120	113.34	94.43
Delhi	91.28	62.93	74.8	69.3	120	115.86	97
Chennai	N.A.	N.A.	84.32	78.12	124	111.31	92.95

(1) Air india Contract Price.

N.A.: Not Available

Source: Air India

*: As on 1st January.

XIV. 26 INTERNATIONAL PETROLEUM PRICE INDEX DURING 1992—2001

(US$/BARREL)

(1990=100)

PETROLEUM SPOT	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
U.K. BRENT 38.0/0.26	81.87	72.00	72.05	66.92	87.67	80.73	53.83	75.86	120.46	103.60
USA WEST TAXAS INTERMEDIATE 40.0/0.4	84.14	75.43	70.28	75.31	90.76	84.06	58.71	78.90	124.16	106.30
UAE DUBAI FATEH 32.5/1.43	88.45	73.26	72.33	79.00	91.17	88.81	59.62	84.59	127.88	110.69
USA ANS 27.0/1.06	82.85	74.68	71.76	78.38	93.66	86.36	57.03	81.07	129.56	106.48
I.R. IRAN LIGHT 33.9/1.4	86.09	72.97	71.90	78.34	92.20	88.37	57.99	83.58	129.60	110.95
I.R. IRAN HEAY 31.0/1.6	83.98	70.72	73.13	81.67	92.87	90.41	57.51	85.03	130.69	108.84
INDONESIA MINAS 33.9/0.1	82.72	76.91	69.69	75.84	88.99	82.80	52.92	76.70	123.56	NA
NIGERIA BONNY LIGHT 36.7/0.1	82.57	72.72	67.09	71.77	87.91	80.30	52.86	74.79	117.92	NA
MEXICO ISTHUMUS 31.8/1.51	81.86	72.20	69.66	75.87	93.65	82.81	54.78	78.41	126.08	NA
RUSSIA URALS 36.1/2.52	80.30	68.28	67.39	73.74	89.22	81.10	52.26	76.49	117.92	101.91
MALAYSIA TAPIS 44.3/0.2	86.25	78.28	71.18	75.96	91.40	86.88	57.35	78.49	123.56	105.69
AUSTRALIA GIPPSLAND 46.0/0.13	85.56	74.77	68.16	73.37	89.03	84.04	56.44	78.32	124.47	106.77
SAUDI ARABIA ARAB HEAVY 28.0/3.0	81.09	69.42	72.72	83.00	98.24	91.48	58.07	87.59	134.47	116.68

Note : The number below the crude name show the API gravities and percentage of sulphur by weight.

Source : Based on data from OPEC Annual Statistical Bulletin, 2001.

XIV. 27.TANKER FLEET DEVELOPMENT IN OPEC MEMBERS, 1997-2001 (1,000 dwt)

	1997		1998		1999		2000		2001	
	no	dwt	no	dwt	no	dwt	no	dwt	no	dwt
Algeria	1	22.6	1	22.6	1	22.6	1	22.6	1	22.6
Indonesia	25	739.1	25	739.1	31	904.2	32	988.9	32	988.9
IR Iran	25	3,996.1	17	2,998.9	20	3,523.6	21	3,699.6	24	3,070.6
Iraq	17	1,517.0	16	1,364.2	9	534.3	9	534.3	9	534.3
Kuwait	27	3,156.9	26	3,343.0	17	2,890.3	16	2,862.9	26	3,329.6
SP Libyan Al	10	1,254.5	9	1,113.5	5	526.9	6	775.3	6	775.3
Nigeria	3	423.7	2	413.0	2	413.0	2	413.0	2	413.0
Qatar	5	479.0	5	479.0	5	465.8	4	368.6	4	368.6
Saudi Arobia	14	719.3	10	521.8	11	481.3	12	578.6	12	578.6
United Arab Emirates	10	509.4	13	659.4	13	659.4	10	291.6	10	291.6
Venezuela	10	521.8	10	521.8	7	373.8	6	320.3	6	320.3
OPEC	**147**	**13,339**	**134**	**12,176**	**121**	**10,795**	**119**	**10,856**	**132**	**10,693**
Total world	**3,323**	**292,398**	**3,424**	**300,460**	**3,313**	**289,358**	**3,329**	**292,059**	**3,336**	**291,110**
OPEC percentioge		4.6		4.1		3.7		3.7		3.7

Note: Total world includes commercial units and government owned vessels.
Source: OPEC Annual Statistical Bulletin, 2001.
dwt = Deadweight tonnage

XIV. 28 WORLD TANKER FLEET BY AGE, 2001 (1,000 dwt)

	1986 and earlier		1987-91		1992-96		1997-2001		Total	
	no	dwt	no	dwt	no	dwt	no	dwt	no	dwt
10,000–19,999	279	4,230.0	47	712.6	82	1,126.1	145	2,160.2	553	8,228.9
20,000–29,999	234	6,238.8	52	1,476.2	30	859.6	22	516.5	338	9,091.1
30,000–39,999	310	10,796.8	37	1;389.5	51	1,836.0	103	3,596.3	501	17,618.6
40,000–49,999	100	4,408.6	68	2,949.4	89	3,936.0	124	5,681.4	381	16,975.3
50,000–59,999	78	4,296.7	5	275.7	2	110.2	—	—	85	4,682.5
60,000–69,999	118	7,588.5	22	1,439.7	25	1,681.9	16	1,069.6	181	11,779.7
70,000–74,999	6	425.2	1	70.9	1	70.9	13	937.4	21	1,504.5
75,000–89,999	140	11,972.9	38	3,226.4	10	851.1	5	402.1	193	16,452.5
90,000–99,999	47	4,439.1	43	4,135.1	84	8,103.5	24	2,368.2	198	19,045.9
100,000–109,999	14	1,479.2	19	1,963.2	13	1,360.7	95	10,048.0	141	14,851.1
110,000-119,999	8	926.5	9	1,009.5	2	222.2	16	1,790.6	35	3,948.8
120,000–129,999	20	2,505.2	6	753.2	4	493.5	12	1,512.1	42	5,264.0
130,000–139,999	16	2,172.6	9	1,230.2	13	1,751.6	2	268.8	40	5,423.3
140,000–149,999	7	996.6	23	3,342.9	36	5,270.2	23	3,409.6	89	13,019.3
150,000–159,999	15	2,316.8	18	2,772.9	11	1,705.8	43	6,679.4	87	13;475.0
160,000–199,999	10	1,793.8	—	—	—	—	5	810	15	2,604.2
200,000–229,999	3	668.3	1	214.9	—	—	—	—	4	883.1
230,000–259,999	30	7,378.1	35	8,833.6	33	8,455.4	11	2,848.0	109	27,515.1
260,000–299,999	39	10,668.5	25	6,958.9	70	20,120.5	46	13,280.3	180	51,028.2
300,000-349,999	12	3,820.2	2	609	31	9399	63	19277	108	33,104.6
350,000 and over	35	14,614.4	—	—	—	—	—	—	35	14,614.4
Total world	**1,521**	**103,736.7**	**460**	**43,364.0**	**587**	**67,353.7**	**768**	**76,655.6**	**3,336**	**291,110.0**

Note: Total world includes commercial units and the Govt. owned vessels.
Source: OPEC Annual Statistical Bulletin-2001.
dwt = Deadweight tonnage

XIV. 29 INTER-AREA TOTAL OIL MOVEMENTS DURING 2001

(Million tonnes)

To/FROM	USA	Canada	Mexico	S&C America	Europe Europe	Africa Europe	Australasia	China	Japan	Other Pacific	Rest of World	Unidentified	Total
USA	—	6.3	12.1	7.9	11.1	0.2	0.3	0.3	0.6	3.9	0.9	—	43.6
Canada	88.0	—	—	0.2	0.5	—	—	—	—	0.2	—	—	88.9
Mexico	70.8	1.3	—	9.2	9.8	0.2	—	—	1.1	1.0	0.2	—	93.6
South & Central America	126.3	6.0	1.5	—	13.8	0.6	—	0.3	0.4	5.6	—	—	154.5
Europe	46.2	28.9	0.3	2.2	—	7.1	—	1.1	0.1	5.2	4.2	—	95.3
Former Soviet Union	4.3	—	—	7.1	181.2	0.5	—	5.3	0.7	8.7	2.3	20.0	230.1
Middle East	138.0	7.2	1.1	11.8	176.2	41.0	9.1	34.2	208.8	316.7	2.5	—	946.6
North Africa	13.7	3.6	0.8	4.3	96.9	3.9	—	0.3	0.5	7.0	3.2	—	134.2
West Africa	68.1	1.0	—	11.3	34.9	1.5	—	3.8	0.8	36.9	—	—	158.3
East & Southern Africa	—	—	—	—	—	—	—	5.0	1.4	0.9	—	—	7.3
Australasia	2.2	—	—	—	—	—	—	1.0	3.9	14.1	—	—	21.2
China	1.1	—	—	0.3	0.2	—	0.3	—	4.2	8.4	—	—	14.5
Japan	0.4	—	—	—	0.1	0.2	0.2	1.1	—	2.5	—	—	4.5
Other Asia Pacific	9.4	0.2	0.2	—	2.3	0.3	19.4	27.2	34.2	10.8	0.8	—	104.8
Unidentified*	5.2	2.3	—	—	42.9	—	1.2	8.7	0.5	1.1	—	—	61.9
TOTAL IMPORTS	**573.7**	**56.8**	**16.0**	**54.3**	**569.9**	**55.5**	**30.5**	**88.3**	**257.2**	**423.0**	**14.1**	**20.0**	**2159.3**

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

Source: B.P. Amoco Statistical Review of World Energy, June 2002.

XIV. 30 WORLD PRIMARY ENERGY CONSUMPTION BY FUEL-*2001

(Million Tonnes oil equivalent)

Country/Region	OIL	N.Gas	Coal	Nuclear	Hydro	Total
1	2	3	4	5	6	7
USA	895.6	554.6	555.7	183.2	48.3	2237.3
Canada	88.0	65.4	28.9	17.4	75.0	274.6
Mexico	82.7	30.4	6.3	2.0	6.4	127.7
Total North America	**1066.3**	**650.4**	**590.9**	**202.6**	**129.7**	**2639.6**
Argentina	19.0	29.9	0.7	1.6	8.0	59.2
Brazil	85.1	9.8	14.0	3.2	61.4	173.6
Chile	12.0	5.0	4.0	—	4.8	25.8
Colombia	9.9	5.5	2.4	—	7.1	24.8
Ecuador	5.9	0.1	—	—	1.6	7.6
Peru	6.8	0.3	0.6	—	4.0	11.7
Venezuela	22.2	26.0	!	—	13.7	61.9
Other S. & Cent. America	57.5	10.6	0.7	—	18.3	87.2
Total S. & Cent. America	**218.4**	**87.2**	**22.4**	**4.8**	**118.9**	**451.8**
Austria	12.4	6.6	2.7	—	9.8	31.6
Belgium & Luxembourg	32.3	13.2	7.1	10.7	0.6	63.9
Bulgaria	4.6	2.3	6.1	4.5	0.8	18.2
Czech Republic	8.3	8.0	21.3	3.3	0.6	41.6
Denmark	10.1	4.6	4.2	—	!	18.9
Finland	10.5	3.7	3.9	5.2	3.0	26.3
France	95.8	36.6	10.9	94.9	18.1	256.4
Germany	131.6	74.6	84.4	38.7	5.8	335.2
Greece	19.4	1.8	9.5	—	0.5	31.1
Hungary	6.8	10.7	3.1	3.2	!	23.9
Iceland	0.9	—	0.1	—	1.5	2.5
Republic of Ireland	8.7	3.6	2.1	—	0.2	14.6
Italy	92.8	58.0	13.9	—	12.5	177.2
Netherlands	43.9	35.3	8.4	0.9	!	88.9
Norway	9.7	4.0	0.6	—	27.4	41.7
Poland	19.0	10.2	57.5	—	1.0	87.7
Portugal	15.2	2.3	3.6	—	2.9	23.9
Romania	10.1	15.8	7.7	1.2	3.4	38.2
Slovakia	3.4	6.7	4.1	3.9	1.1	19.1
Spain	72.7	16.4	19.5	14.4	11.6	134.6
Sweden	15.6	0.7	2.0	16.4	17.9	52.6
Switzerland	13.1	2.5	0.1	6.1	9.7	31.4
Turkey	30.4	14.0	20.4	—	5.4	70.2
United Kingdom	76.1	85.9	40.3	20.4	1.5	224.0
Other Europe	16.8	5.5	10.6	1.2	7.1	41.1
Total Europe	**760.2**	**423.0**	**344.1**	**225.0**	**142.4**	**1894.5**
Azerbaijan	4.6	7.6	—	—	0.3	12.5
Belarus	5.9	14.5	0.3	—	!	20.7
Kazakhstan	7.7	9.1	24.7	—	1.7	43.1
Lithuania	2.8	2.5	0.1	2.6	0.2	8.1

Contd. . . . .

XIV. 30 WORLD PRIMARY ENERGY CONSUMPTION BY FUEL-*2001

(Million Tonnes oil equivalent)

Country/Region	OIL	N.Gas	Coal	Nuclear	Hydro	Total
1	2	3	4	5	6	7
Russian Federation	122.3	335.4	114.6	30.9	39.8	643.0
Turkenistan	2.4	11.6	—	—	—	14.0
Ukraine	12.7	59.2	39.0	17.2	3.0	131.1
Uzbekistan	6.5	46.0	1.1	—	1.3	54.8
Other Former Soviet Union	4.7	7.7	0.6	0.5	8.6	22.1
Total Former Soviet Union	**169.6**	**493.6**	**180.4**	**51.2**	**54.9**	**949.4**
Iran	54.2	58.5	0.8	—	0.8	114.3
Kuwait	10.5	8.6	—	—	—	19.1
Qatar	1.4	14.4	—	—	—	15.7
Saudi Arabia	62.7	48.3	—	—	—	111.0
United Arab Emirates	14.3	30.8	—	—	—	45.2
Other Middle East	63.3	20.7	7.2	—	0.7	91.9
Total Middle East	**206.4**	**181.3**	**8.0**	—	**1.5**	**397.2**
Algeria	8.8	19.4	0.6	—	!	28.8
Egypt	26.2	18.9	0.9	—	3.0	49.0
South Africa	23.0	—	80.6	2.6	0.8	107.0
Other Africa	59.0	15.8	6.5	—	14.5	95.8
Total Africa	**117.0**	**54.1**	**88.6**	**2.6**	**18.3**	**280.6**
Austrailia	38.1	20.3	47.6	—	3.9	109.9
Bangladesh	3.4	9.7	0.1	—	0.2	13.4
China	231.9	24.9	520.6	4.0	58.3	839.7
China Hong Kong SAR	9.5	2.2	4.9	—	—	16.6
India	97.1	23.7	173.5	4.4	16.1	314.7
Indonesia	52.3	26.7	16.7	—	2.1	97.9
Japan	247.2	71.1	103.0	72.7	20.4	514.5
Malaysia	18.6	19.4	2.4	—	1.7	42.1
New Zealand	6.2	5.2	1.3	—	5.0	17.6
Pakistan	18.9	18.1	2.0	0.5	4.0	43.4
Philippines	16.5	0.1	4.5	—	1.6	22.7
Singapore	36.9	2.3	—	—	—	39.1
South Korea	103.1	20.8	45.7	25.4	0.9	195.9
Taiwan	37.7	6.8	30.9	8.0	2.1	85.4
Thailand	33.8	19.0	8.8	—	1.4	63.0
Other Asia Pacific	21.5	4.4	58.7	—	11.1	95.8
Total Asia Pacific	**972.7**	**274.7**	**1020.7**	**115.0**	**128.8**	**2511.7**
TOTAL WORLD	**3510.6**	**2164.3**	**2255.1**	**601.2**	**594.5**	**9124.8**
of which European Union 15	637.1	343.3	212.5	201.6	84.4	1478.9
OECD	2189.6	1167.2	1108.2	518.8	291.0	5274.5
Former Soviet Union	169.6	493.6	180.4	51.2	54.9	949.4
Other EMEs	1151.4	503.5	966.5	31.2	248.6	2900.9

*In this Review, primary energy comprises commerically raded fuels only. Excluded, therefore, are fuelds such as wood, peat and animal waste which, though important in many countries, are unreliably documented in terms of consumption statistics.
!=Less than 0.05

XIV. 31 PER CAPITA PRIMARY ENERGY CONSUMPTION DURING 2001
SOME INTERNATIONAL COMPARISON

(Kg. Oil Equivalent)

Country/Areas	Oil	N. Gas	Coal	Nuclear	Hydro-elct.	Total
1	2	3	4	5	6	7
USA	3148	1949	1953	644	170	7864
Canada	2839	2110	932	561	2419	8858
Mexico	830	305	63	20	64	1282
Total North America	**3374**	**2058**	**1870**	**641**	**410**	**8353**
Austria	1531	815	333	-	1210	3901
Belgium & Luxembourg	3019	1234	664	1000	56	5972
Bulgaria	568	284	753	556	99	2247
Czech republic	806	777	2068	320	58	4039
Denmark	1870	852	778	-	+	3500
Finland	2019	712	750	1000	577	5058
France	1618	618	184	1603	306	4331
Germany	1601	908	1027	471	71	4078
Greece	1780	165	872	-	46	2853
Hungary	680	1070	310	320	+	2390
Iceland	3000	-	333	-	5000	8333
Republic of Ireland	2289	947	553	-	53	3842
Itlay	1606	1003	240	-	216	3066
Netherlands	2744	2206	525	56	+	5538
Norway	2156	889	133	-	6089	9267
Poland	492	264	1490	-	26	2272
Portugal	1520	230	360	-	290	2390
Romania	451	705	344	54	152	1705
Slovakia	630	1241	759	722	204	3537
Sain	1827	412	490	362	291	3382
Sweden	1752	79	225	1843	2011	5910
Switzerland	1819	347	14	847	1347	4361
Turkey	452	208	303	-	80	1043
United Kingdom	1268	1432	672	340	25	3733
Others	96	31	61	7	41	235
Total Europe	**1046**	**582**	**473**	**309**	**196**	**2606**
Russian Federation	847	2323	794	214	276	4453
Total Former Soviet Union	**624**	**1815**	**663**	**188**	**202**	**3490**
Algeria	284	626	19	-	+	929
Egypt	375	271	13	-	43	702
South Africa	528	-	1849	60	18	2454
Other Africa	88	23	10	-	22	142
Total Africa	**143**	**66**	**108**	**3**	**22**	**343**
Australia	1964	1046	2454	-	201	5665
Bangladesh	25	73	1	-	1	100
China	182	20	409	3	46	659
India*	94	23	168	4	16	305
Indonesia	254	130	81	-	10	475
Japan	1945	559	810	572	161	4048
Malaysia	819	855	106	-	75	1855
New Zealand	1590	1333	333	-	1282	4513
Pakistan	130	125	14	3	28	299
Philippines	214	1	58	-	21	294
Singapore	9000	561	-	-	-	9536
South Korea	2113	426	936	520	18	4014
Thailand	542	304	141	-	22	1010
Other Asia Pasific	78	16	213	-	40	348
Total Asia Pacific	**281**	**79**	**295**	**33**	**37**	**726**
Total World	**572**	**353**	**367**	**98**	**97**	**1487**
of which OECD	1632	870	826	387	217	3932
European Union 15	1685	908	562	533	223	3912
Other EMEs†	243	106	204	6	52	612

Source: BP Statistical Review of World Energy, June 2002
† = Excludes Central Europe and Former Soviet Union.
+= Negligible

XIV. 32 PER CAPITA CONSUMPTION OF MAIN PETROLEUM PRODUCTS SOME INTERNATIONAL COMPARISONS DURING 2001

(Kg/per capita)

Country/Area	Gasoline	Middle Distillates	Fuel Oil	Others	Total
USA	1550	1020	145	712	3426
Europe	281	474	135	208	1099
Middle East	271	488	399	226	1384
China	48	66	28	53	197
Japan	668	765	270	417	2120
OECD	631	608	164	353	1757

Source : (1) BP Amoco Statistical Review of World Energy, June 2002.
(2) United Nations population divisions publication 'World population prospects, 2001.

XIV. 33 TRENDS IN WORLD PRIMARY ENERGY CONSUMPTION (1980 TO 2001)

(Million Tonnes Oil Equivalent)

Year	Oil	Natural Gas	Coal	Hydro Electricity	Nuclear Energy	Total
1	2	3	4	5	6	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	3037.5	1662.1	2241.5	183.7	488.4	7613.2
1989	3087.5	1737.5	2272.2	183.3	502.3	7782.7
1990	3134.5	1770.5	2244.5	189.4	516.7	7855.6
1991	3133.6	1902.8	2189.7	194.6	541.4	7862.1
1992	3163.2	1805.3	2171.8	193.9	545.6	7879.8
1993	3134.6	1844.6	2162.4	204.4	564.4	7910.4
1994	3193.8	1853.4	2174.1	206.1	574.6	8002.0
1995	3234.7	1911.7	2206.7	216.2	599.9	8169.2
1996	3313.6	2004.7	2284.5	219.1	520.9	8342.8
1997	3386.3	1990.3	2265.8	223.4	616.5	8482.3
1998	3406.6	2015.4	2243.2	224.8	626.9	8516.9
1999	3469.1	2065.1	2159.9	226.6	651.5	8572.2
2000	3519.0	2157.5	2216.8	616.9	585.0	9095.6
2001(P)	3510.6	2164.3	2255.1	594.5	601.2	9124.8

Source: B.P. Amoco Statistical Review of World Energy June 2002.

(P)-= Provisional

XIV. 34 PRIMARY ENERGY CONSUMPTION *IN SELECTED COUNTRIES/ AREAS OF THE WORLD 1996-2001

(Million Tonnes Oil Equivalent)

Country/Region	1996	1997	1998	1999	2000	2001	% change 2001/2000	%share of total 2001
1	2	3	4	5	6	7	8	9
USA	2172.7	2187.6	2196.0	2239.9	2287.4	2237.3	-2.2%	24.5%
Canada	275.9	277.4	269.4	274.8	284.8	274.6	-3.6%	3.0%
Mexico	116.4	120.0	125.6	126.9	131.0	127.7	-2.5%	1.4%
Total North America	**2565.0**	**2585.0**	**2591.0**	**2641.6**	**2703.2**	**2639.6**	**-2.4%**	**28.9%**
Argentina	53.9	55.9	57.9	57.3	58.8	59.2	0.7%	0.6%
Brazil	151.0	160.5	166.8	171.1	177.3	173.6	-2.1%	1.9%
Chile	19.1	22.3	21.6	22.4	24.6	25.8	4.8%	0.3%
Colombia	27.7	27.9	27.3	25.0	24.9	24.8	-0.3%	0.3%
Ecuador	7.2	8.1	8.2	7.7	7.7	7.6	-0.3%	0.1%
Peru	11.0	10.8	11.3	11.4	11.7	11.7	-0.3%	0.1%
Venezuela	58.0	61.1	63.8	59.8	61.9	61.9	▲	0.7%
Other S. & Cent. America	78.1	80.9	83.2	84.7	86.3	87.2	1.0%	1.0%
Total S. & Cent. America	**406.0**	**427.5**	**440.1**	**439.4**	**453.2**	**451.8**	**-0.3%**	**5.0%**
Austria	29.1	30.3	30.9	31.6	31.5	31.6	-.4%	0.3%
Belgium & Luxembourg	59.1	60.3	63.0	64.1	66.4	63.9	-3.6%	0.7%
Bulgaria	23.3	20.7	20.7	18.0	18.9	18.2	-3.3%	0.2%
Czech Republic	43.0	41.7	39.9	38.5	39.8	41.6	4.6%	0.5%
Denmark	24.1	21.7	20.6	19.9	18.8	18.9	0.5%	0.2%
Finland	24.5	25.1	25.6	25.7	26.0	26.3	1.1%	0.3%
France	244.7	241.0	247.2	251.4	254.8	256.4	0.6%	2.8%
Germany	344.0	337.8	334.5	328.5	330.5	335.2	1.4%	3.7%
Greece	27.0	27.2	28.6	30.1	31.8	31.1	-2.1%	0.3%
Hungary	24.2	23.8	23.8	23.7	23.0	23.9	3.8%	0.3%
Iceland	1.9	2.1	2.2	2.3	2.4	2.5	3.0%	▲
Republic of Ireland	10.8	11.6	12.4	13.2	13.9	14.6	5.1%	0.2%
Italy	162.4	163.9	168.5	173.7	176.4	177.2	0.4%	1.9%
Netherlands	85.2	84.7	84.5	83.2	86.5	88.6	2.5%	1.0%
Norway	37.1	39.3	40.4	41.5	45.9	41.7	-9.2%	0.5%
Poland	100.8	98.6	94.1	91.1	88.4	87.7	-0.9%	1.0%
Portugal	19.4	20.4	22.4	24.0	23.6	23.9	1.3%	0.3%
Romania	48.2	45.2	41.3	36.9	37.0	38.2	3.1%	0.4%
Slovakia	17.5	17.1	17.6	17.5	18.1	19.1	5.2%	0.2%
Spain	104.8	111.7	118.1	122.7	129.2	134.6	4.2%	1.5%
Sweden	48.8	50.4	51.6	51.6	48.6	52.6	8.4%	0.6%
Switzerland	27.1	28.9	29.1	30.1	29.4	31.4	6.9%	0.3%
Turkey	67.7	69.6	70.6	68.9	73.7	70.2	-4.7%	0.8%
United Kingdom	224.8	219.8	223.1	221.9	222.2	224.0	0.8%	2.5%
Other Europe	41.1	41.6	43.4	40.7	41.0	41.1	0.2%	0.5%
Total Europe	**1840.6**	**1834.5**	**1854.1**	**1850.8**	**1877.8**	**1894.5**	**0.9%**	**20.8%**
Azerbaijan	12.6	11.4	12.6	12.8	11.4	12.5	9.1%	0.1%
Belarus	21.4	23.5	22.2	20.9	21.0	20.7	-1.4%	0.2%
Kazakhstan	45.9	40.7	39.1	35.0	40.5	43.1	6.4%	0.5%
Lithuania	9.0	8.6	9.2	7.8	7.0	8.1	16.5%	0.1%

Contd. . . .

XIV. 34 PRIMARY ENERGY CONSUMPTION *IN SELECTED COUNTRIES/ AREAS OF THE WORLD 1996-2001

(Million Tonnes Oil Equivalent)

Country/Region	1996	1997	1998	1999	2000	2001	% change 2001/2000	%share of total
1	2	3	4	5	6	7	8	9
Russian Federation	647.2	614.3	614.2	626.4	640.3	643.0	0.4%	7.0%
Turkmenistan	12.0	12.1	12.0	12.7	13.6	14.0	2.6%	0.2%
Ukraine	141.6	138.9	133.7	133.7	132.6	131.1	-1.1%	1.4%
Uzbekistan	49.0	50.1	51.8	53.6	50.9	54.8	7.8%	0.6%
Other Former Soviet Union	22.3	23.8	23.6	21.7	21.0	22.1	5.1%	0.2%
Total Former Soviet Union	**961.0**	**923.4**	**918.4**	**924.6**	**938.3**	**949.4**	**1.2%**	**10.4%**
Iran	98.5	103.7	105.2	113.4	115.0	114.3	-0.6%	1.3%
Kuwait	14.6	15.3	17.7	18.1	19.0	19.1	0.4%	0.2%
Qatar	13.4	14.3	14.5	13.7	14.7	15.7	7.1%	0.2%
Saudi Arabia	93.7	96.1	101.0	102.5	107.2	111.0	3.5%	1.2%
United Arab Emirates	42.3	42.4	39.2	41.3	43.8	45.2	3.0%	0.5%
Other Middle East	80.3	85.2	88.0	88.8	90.6	91.9	1.4%	1.0%
Total Middle East	**342.8**	**357.0**	**365.6**	**377.8**	**390.3**	**397.2**	**1.8%**	**4.4%**
Algeria	27.9	26.5	27.7	27.8	28.0	28.8	3.0%	0.3%
Egypt	38.4	40.0	42.1	45.0	47.8	49.0	2.5%	0.5%
South Africa	106.0	109.4	108.8	107.9	108.4	107.0	-1.3%	1.2%
Other Africa	83.6	85.5	88.2	90.7	92.7	95.8	3.4%	1.1%
Total Africa	**255.9**	**261.4**	**266.8**	**271.4**	**276.9**	**280.6**	**1.4%**	**3.1%**
Australia	101.3	103.6	105.0	105.4	108.1	109.9	1.7%	1.2%
Bangaldesh	10.0	10.6	11.0	11.1	12.6	13.4	6.2%	0.1%
China	912.7	898.0	872.8	786.6	804.7	839.7	4.3%	9.2%
China Hong Kong SAR	15.0	15.1	15.4	15.6	15.6	16.6	6.6%	0.2%
India	269.8	280.8	290.0	297.1	313.3	314.7	0.5%	3.4%
Indonesia	79.4	84.0	80.0	89.1	93.8	97.9	4.4%	1.1%
Japan	503.6	507.4	502.2	508.7	515.9	514.5	-0.3%	5.6%
Malaysia	36.0	37.7	37.4	40.5	42.3	42.1	-0.4%	0.5%
New Zealand	17.2	17.3	16.8	17.4	17.8	17.6	-1.0%	0.2%
Pakistan	38.3	37.4	39.6	40.8	42.8	43.4	3.2%	0.5%
Philippines	21.1	22.6	22.9	22.7	22.6	22.7	0.5%	0.2%
Singapore	31.6	33.8	34.7	32.9	35.0	39.1	11.7%	0.4%
South Korea	163.8	179.6	165.5	180.5	191.1	195.9	2.5%	2.1%
Taiwan	68.9	72.9	77.5	81.1	85.6	85.4	-0.1%	0.9%
Thailand	58.4	61.2	58.2	59.7	62.4	63.0	1.0%	0.7%
Other Asia Pacific	88.2	90.0	88.0	89.0	93.0	95.8	3.0%	1.0%
Total Asia Pacific	**2415.3**	**2452.0**	**2417.0**	**2378.2**	**2455.9**	**2511.7**	**2.3%**	**27.5%**
Total World	**8786.6**	**8840.8**	**8853.0**	**8883.8**	**9095.6**	**9124.8**	**0.3%**	**100.0%**
of which: European Union 15	1408.7	1405.9	1431.0	1441.6	1460.2	1478.9	1.3%	16.2%
OECD	5078.9	5119.9	5129.2	5208.8	5317.0	5274.5	-0.8%	57.8%
Former Soviet Union	961.0	923.4	918.4	924.6	938.3	949.4	1.2%	10.4%
Other EMEs	2746.7	2797.5	2805.4	2750.4	2840.3	2900.9	2.1%	31.8%

*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 unreliably documented in terms of consumption statistics.
▲ Less than 0.05%.

XIV. 35 ECONOMIC INDICATORS OF OPEC NATIONS DURING 2001

Country	Mid year population 2001 (million)	GDP* 2001 (Bn. $)	Per capita GDP 2001 (US$)	Petroleum* exports 2001	Total* exports FOB (Bn. $)	Petroleum exports as % of total exports	Oil reserves* Dec. 2001 (Bn. bes)	Gas reserves* Dec. 2001 (Bn. CM)	Producing oil wells Dec. 2001	Refining capicity Dec. 2001 (000/bbls/day)	Exports of refined products (000/bbls/day)
1	2	3	4	5	6	7	8	9	10	11	12
Algeria	31.04	54.64	1760	11.79	19.13	61.6	11.31	4523	1284	462.2	555.8
Indonesia	213.59	145.50	681	8.94	54.70	16.3	5.12	3800	9150	1057.0	196.3
I.R. Iran	64.58	114.14	1767	21.42	24.07	89.0	99.08	26600	NA	1474.0	307.7
Iraq	23.60	27.80	1178	12.68	15.91	79.7	112.50	3109	NA	603.0	25.0
Kuwait	2.28	32.81	14420	14.98	16.21	92.4	96.50	1557	805	899.0	642.3
Libya	5.40	28.60	5294	10.88	11.19	97.2	36.00	1314	1545	380.0	225.0
Nigeria	130.30	41.11	315	17.19	20.83	82.5	31.51	4503	2430	445.0	45.7
Qatar	0.58	16.16	27853	6.96	10.25	67.9	15.21	25768	442	63.0	78.1
Saudi Arabia	20.81	186.49	8962	62.98	73.03	86.2	262.70	6456	1575	1825.0	1082.6
U.A.E.	3.28	67.49	20576	22.41	41.40	54.1	97.80	6060	1410	491.3	398.2
Venezuela	24.60	124.91	5078	20.30	27.41	74.1	77.69	4163	14987	1183.2	761.1
Total	520.05	839.64	1615	210.53	314.11	67.0	845.41	87853	34243	8882.7	4317.8

Note: Total includes figures for Saudi-Kuwait neutral Zone
* = Provisional or estimated figures of July 11, 2000
na = Not available
Source : OPEC Annual Statistical Bulletin, 2001.

XIV. 36 WORLD IMPORTS OF NATURAL GAS BY COUNTRY, 1997-2001

(Million Standard cu. m)

	1997	1998	1999	2000	2001	%change 2001/00
North America	**86,051**	**91,375**	**102,090**	**109,208**	**118,054**	**8.1**
Canada	1,270	1,270	1,200	2,060	4,460	116.5
United States	84,781	90,105	100,890	107,148	113,594	6.0
Latin America	**3,750**	**4,970**	**6,690**	**9,520**	**13,500**	**41.8**
Argentina	1,830	2,200	1,200	—	—	—
Brazil	—	—	370	2,120	3,640	71.7
Chile	670	1,240	3,390	4,070	5,270	29.5
Mexico	1,250	1,530	1,730	2,980	3,960	32.9
Puerto Rico	—	—	—	350	630	80.0
Eastern Europe	**41,300**	**39,760**	**39,350**	**40,850**	**41,270**	**1.0**
Bulgaria	5,100	3,600	3,350	3,200	2,900	-9.4
Former Czechoslovakia	16,000	16,260	16,600	17,300	17,800	2.9
Hungary	8,000	8,500	8,700	9,200	9,570	4.0
Poland	7,700	7,600	7,500	7,750	8,000	3.2
Romania	4,500	3,800	3,200	3,400	3,000	-11.8
Western Europe	**213,390**	**219,910**	**242,380**	**265,370**	**266,620**	**0.5**
Austria	6,030	6,200	6,120	6,120	6,440	5.2
Belgium	14,300	15,500	16,120	16,300	15,620	-4.2
Finland	3,700	4,200	4,200	4,300	4,540	5.6
France	35,150	36,800	41,120	42,620	41,590	-2.4
Germany	75,380	73,800	75,230	76,200	78,160	2.6
Greece	160	900	1,500	2,140	1,980	-7.5
Ireland	830	1,500	2,100	2,600	3,500	34.6
Italy	39,150	42,600	49,410	58,500	54,750	-6.4
Luxembourg	710	760	700	700	900	28.6
Netherlands	5,890	5,300	7,340	12,600	11,330	-10.1
Portugal	500	800	2,150	2,350	2,460	4.7
Spain	12,470	12,600	15,450	16,930	18,840	11.3
Sweden	860	860	840	840	900	7.1
Switzerland	2,620	2,700	3,040	3,050	3,050	—
Turkey	9,750	10,380	12,300	14,300	2,700	11.0
United Kingdom	1,320	900	1,370	2,200	2,700	22.7
Former Yugoslavia	4,570	4,110	3,390	3,620	3,990	10.2
Middle East	**100**	**1,750**	**2,00**	**2,650**	**4,500**	**69.8**
IR Iran	100	1,750	2,000	2,650	4,500	-8.7
Africa	**910**	**450**	**800**	**1,730**	**1,580**	**-8.7**
Tunisia	910	450	800	1,730	1,580	-8.7
Asia and Pacific	**85,320**	**87,410**	**93,790**	**101,080**	**109,900**	**8.7**
Japan	63,750	66,300	69,360	72,590	74,070	2.0
South Korea	15,710	14,310	17,520	19,680	21,830	10.9
Singapore	1,500	1,500	1,500	1,500	2,500	66.7
Taiwan	4,360	5,300	5,320	5,980	6,300	5.4
Thailand	—	—	90	1,330	5,200	291.0
Total world	**430,821**	**445,625**	**487,100**	**530,408**	**555,242**	**4.7**
OPEC	**100**	**1,750**	**2,000**	**2,650**	**4,500**	**69.8**
OPEC percentage	**—**	**0.4**	**0.4**	**0.5**	**0.8**	

Source: OPEC Annual Statistical Bulletin, 2001

XIV. 37 WORLD IMPORTS OF REFINED PRODUCTS BY COUNTRY, 1997-2001

(1000 b/d)

	1997	1998*	1999*	2000*	2001*	%change 2001/00
North America	**1,304.6**	**1,404.5**	**1,509.1**	**1,761.9**	**1,98.2**	**13.4**
Canada	179.9	184.9	173.8	163.9	210.4	28.3
United States	1,120.6	1,215.4	1,331.0	1,593.7	1,783.5	11.9
Others	4.1	4.2	4.3	4.3	4.3	—
Latin America	**1,426.5**	**1,476.8**	**1,486.3**	**1,548.1**	**1,473.9**	**-4.8**
Brazil	304.2	301.6	304.7	288.4	297.2	3.1
Cuba	131.9	132.3	135.0	131.0	130.0	-0.8
Mexico	292.9	324.7	354.8	437.1	364.6	-16.6
Netherlands Antilles	33.3	33.3	33.5	33.2	33.8	1.8
Panama	20.5	23.8	21.0	17.0	18.1	6.5
Puerto Rico	96.7	98.7	99.0	99.0	100.0	1.0
Others	546.8	562.5	538.4	542.4	530.1	-2.3
Eastern Europe	**339.6**	**359.2**	**269.0**	**199.6**	**221.0**	**10.7**
Bulgaria	8.8	6.0	6.0	12.0	9.7	-19.2
Former USSR	97.7	105.0	40.0	10.0	10.0	—
Hungary	32.4	30.2	26.8	21.1	24.3	15.2
Poland	83.7	98.4	92.3	62.7	63.0	0.5
Others	117.0	119.6	103.9	93.8	114.0	21.5
Western Europe	**4,561.0**	**4,651.2**	**4,843.5**	**5,166.7**	**5,261.7**	**1.8**
Belgium	276.3	287.6	291.4	302.0	322.1	6.7
France	329.3	372.6	574.2	556.8	543.3	-2.4
Germany	1,062.5	961.4	879.1	915.8	945.9	3.3
Italy	431.7	414.2	368.0	359.4	324.2	-9.8
Netherlands	796.2	771.1	813.0	957.4	1,000.1	4.5
United Kingdom	180.4	245.8	257.2	293.8	354.8	20.8
Others	1,484.5	1,598.6	1,660.5	1,781.5	1,771.2	-0.6
Middle East	**339.5**	**347.1**	**342.0**	**347.7**	**362.8**	**4.3**
Syrian ARab Republic	19.2	23.0	20.0	20.2	21.0	4.0
Others	320.3	324.2	322.0	327.5	341.8	4.4
Africa	**444.3**	**469.3**	**480.6**	**533.1**	**447.2**	**-16.1**
Egypt	35.6	47.7	49.3	50.7	53.2	4.9
Morocco	32.7	25.7	27.0	28.5	29.6	3.9
Nigeria	37.0	44.5	52.6	106.3	12.7	-88.0
Senegal	8.6	9.4	9.5	9.6	9.9	3.1
Tunisia	53.8	52.6	53.1	51.4	50.0	-2.7
Others	276.7	289.4	289.1	286.6	291.8	1.8
Asia and Pacific	**5,207.1**	**4,959.7**	**5,251.1**	**5,213.9**	**5,190.5**	**-0.4**
Australia	64.9	64.6	76.9	86.2	85.1	-1.2
China	595.8	587.3	631.9	522.4	601.7	15.2
Hong Kong	403.1	409.1	411.0	393.1	387.6	-1.4
India	427.7	437.8	441.2	449.0	462.0	2.9
Japan	1,239.0	1,074.8	1,238.3	1,243.2	1,161.2	-6.6
New Zealand	26.9	20.0	31.0	25.6	27.1	5.6
Singapore	633.9	649.4	643.2	632.7	626.3	-1.0
Others	1,815.7	1,716.6	1,777.5	1,861.6	1,839.5	-1.2
Total world	**13,622.7**	**13,668.0**	**14,181.5**	**14,771.0**	**14,955.2**	**1.2**

Source: OPEC Annual Statistical Bulletin, 2001

XIV. 38 WORLD CRUDE OIL EXPORTS BY COUNTRY, 1997-2001

(1000 b/d)

	1997	1998	1999	2000*	2001*	%change 2001/00
North America	**1,139.6**	**1,258.7**	**1,168.0**	**1,226.7**	**1,153.9**	**-5.9**
Canada	1,042.9	1,146.4	1,074.4	1,175.2	1,130.2	-3.8
United States	96.7	112.2	120 6	51.5	23.7	-54.0
Latin America	**5,061.7**	**5,188.5**	**4,715.5**	**5,039.5**	**5,060.9**	**0.4**
Colombia	344.7	444.4	515.4	608.0	576.0	-5.3
Ecuadar	256.5	242.8	226.4	219.4	243.0	10.8
Mexico	1,793.0	1,807.4	1,671.7	1,848.5	1,882.5	1.8
Trinidad & Tobago	55.6	52.4	58.0	60.2	62.7	4.2
Venezuela	2,210.8	2,243.9	1,923.0	2,003.5	1,964.7	-1.9
Others	401.0	397.6	320.9	300.0	331.9	10.7
Eastern Europe	**2,177.9**	**2,428.2**	**2,565.0**	**3,058.3**	**3,346.1**	**9.4**
Former USSR	2,174.0	2,425.1	2,562.8	3,056.3	3,344.4	9.4
Others	3.9	3.1	2.2	2.0	1.7	-15.0
Western Europe	**4,569.2**	**4,525.7**	**4,670.5**	**4,985.2**	**4,904.9**	**-1.6**
Norway	2,833.4	2,713.9	2,696.0	2,902.8	2,978.8	2.6
United Kingdom	1,502.2	1,606.7	1,707.0	1,735.4	1,645.9	-5.2
Others	233.7	205.1	267.4	347.1	280.3	-19.2
Middle East	**14,553.7**	**15,597.9**	**15,147.0**	**16,016.5**	**15,390.6**	**-3.9**
Iran	2,587.0	2,512.0	2,291.0	2,492.2	2,446.0	-1.9
Iraq	746.6	1,417.6	2,130.9	2,039.8	1,710.2	-16.2
Kuwait	1,134.2	1,190.2	948.2	1,230.7	1,214.1	-1.3
Oman	852.4	842.6	891.5	905.0	917.0	1.3
Qatar	465.0	572.4	580.5	617.6	605.5	-2.0
Saudi Arabia	6,184.5	6,390.4	5,719.7	6,253.1	6,035.9	-3.5
Syrian Arab Republic	350.8	340.3	347.1	338.0	346.0	2.4
United Arab Emirates	1,949.0	2,039.0	1,919.0	1,814.9	1,786.7	-1.6
Others	284.2	293.3	319.2	325.3	329.3	1.2
Africa	**5,035.2**	**5,226.1**	**4,863.0**	**5,172.4**	**5,261.5**	**1.7**
Algeria	373.1	549.4	414.6	461.1	441.5	-4.2
Angola	664.3	698.1	699.3	668.9	660.2	-1.3
Cameraon	107.8	120.8	107.2	107.9	111.7	3.5
Congo	224.1	238.2	256.2	249.8	250.0	0.1
Egypt	122.2	55.5	56.1	51.6	53.6	3.9
Gaban	351.3	336.1	314.4	308.2	315.0	2.2
SP Libyan AJ	1,115.7	1,161.0	991.7	1,005.0	987.6	-1.7
Nigeria	1,855.5	1,832.8	1,705.1	1,986.4	2,089.4	5.2
Others	221.3	234.2	318.3	333.5	352.4	5.7
Asia and Pacific	**2,275.6**	**2,210.7**	**2,222.1**	**2,266.2**	**2,214.8**	**-2.3**
Australia	206.5	216.7	205.3	383.6	356.3	-7.1
Brunei	146.8	146.3	168.4	171.9	176.2	2.5
China	400.4	312.9	143.7	209.3	164.7	-21.3
Indonesia	709.7	678.0	781.9	622.5	599.2	-3.7
Malaysia	373.3	401.7	395.5	380.2	397.6	4.6
Vietnam	218.2	248.0	300.9	286.9	303.2	5.7
Others	220.8	207.2	226.3	211.7	217.6	2.8
Total world	**34,812.9**	**36,435.8**	**35,351.0**	**37,764.9**	**37,332.7**	**-1.1**
OPEC	**19,331.1**	**20,586.9**	**19,405.5**	**20,526.7**	**19,880.8**	**-3.1**
OPEC percentage	**55.5**	**56.5**	**54.9**	**54.4**	**53.3**	

Source: OPEC Annual Statistical Bulletin, 2001

XIV. 39 WORLD EXPORTS OF REFINED PRODUCTS BY COUNTRY, 1997-2001
(1000 b/d)

	1997	1998	1999	2000*	2001*	%change 2001/00
North America	**1,251.3**	**1,174.2**	**1,171.2**	**1,360.3**	**1,374.5**	**1.0**
Canada	382.7	352.6	366.9	370.9	411.4	10.9
United States	868.1	821.6	804.3	989.3	963.1	2.6
Others	0.1					
Latin America	**2,002.2**	**2,130.5**	**2,079.2**	**2,063.9**	**2,131.7**	**3.3**
Argentina	101.6	110.3	81.1	109.0	119.6	9.7
Ecaduor	40.3	34.6	33.9	35.0	40.0	14.3
Mexico	90.9	106.8	100.5	89.2	96.2	7.8
Netherlandes Antilles	213.9	220.5	193.6	205.0	220.0	7.3
Trinicdo & Tobogo	89.6	134.9	133.3	142.6	145.0	1.7
Venezuela	841.5	846.2	828.0	779.6	761.1	2.4
Virgin Islands	375.5	385.0	382.1	385.9	397.2	2.9
Others	249.0	292.1	326.6	317.6	352.6	11.0
Eastern Europe	**1,220.7**	**1,112.8**	**1,143.8**	**1,325.8**	**1,512.3**	**14.1**
Romania	62.1	69.6	44.6	50.4	54.3	7.8
Former USSR	993.0	872.0	913.1	1,086.3	1,246.5	14.7
Others	165.5	171.2	186.1	189.1	211.5	11.8
Western Europe	**4,246.3**	**4,263.2**	**4,252.7**	**4,436.1**	**4,454.1**	**0.4**
Bulgium	370.5	387.4	400.2	414.1	407.1	1.7
France	369.4	332.2	366.9	396.1	399.1	0.8
Germany	264.6	305.6	352.0	393.3	388.6	1.2
Italy	421.9	458.6	409.2	430.8	451.5	4.8
Netherlands	1,305.2	1,304.5	1,298.7	1,371.2	1,416.8	3.3
United Kingdom	570.4	518.6	479.8	443.2	416.9	5.9
Others	944.2	956.3	946.0	987.2	974.1	1.3
Middle East	**3,335.9**	**3,284.2**	**3,302.1**	**3,140.3**	**2,962.6**	**-5.7**
Behrain	248.5	248.0	260.2	260.0	274.0	5.4
IR Iran	225.9	277.8	362.9	347.3	307.7	11.4
Ircc	18.9	23.0	23.0	23.0	25.0	8.6
Kuwait	848.0	795.0	838.6	674.5	642.3	4.8
Qutar	125.0	95.1	75.3	75.3	78.1	3.7
Saudi Arabia	1,392.9	1,368.9	1,279.7	1,228.1	1,082.6	11.8
United Arab Emirates	323.1	319.1	331.0	391.7	398.2	1.7
Others	153.6	157.3	131.5	140.4	154.7	10.2
Africa	**1,049.4**	**957.6**	**1,162.2**	**1,142.7**	**1,193.6**	**4.5**
Algeria	462.3	461.9	599.7	544.3	555.8	2.1
Egypt	109.5	103.3	93.6	87.3	96.3	10.3
Goban	5.2	5.7	6.9	7.0	7.7	9.3
Nigeria	25.3	3.8	14.1	17.3	45.7	164.4
SP Libyan AJ	147.9	168.6	201.2	237.0	225.0	5.0
Others	299.3	214.2	246.7	249.8	263.1	5.3
Asia and Pacific	**2,970.8**	**2,936.4**	**2,852.7**	**2,844.1**	**2,869.8**	**0.9**
Australia	135.0	121.9	122.9	122.8	122.7	0.1
China	198.4	188.6	264.8	292.0	246.9	15.4
Indonesia	257.3	220.8	191.9	188.8	196.3	4.0
Japan	174.7	133.7	109.3	90.1	96.1	6.6
Maleysia	151.3	139.9	146.1	143.1	153.0	6.5
Singapore	973.7	969.8	940.6	892.6	942.0	5.5
Others	1,080.5	1,161.7	1,077.0	1,114.1	1,112.8	0.1
Total world	**16,076.7**	**15,858.9**	**15,963.9**	**16,313.0**	**16,498.5**	**1.1**
OPEC	**4,668.0**	**4,580.2**	**4,745.3**	**4,506.8**	**4,317.8**	**4.2**
OPEC percentage	**29.0**	**28.9**	**29.7**	**27.6**	**26.2**	

Source: OPEC Annual Statistical Bulletin, 2001

PART-III
PLAN STATISTICS

PART-III
PLAN STATISTICS

XV. 2. NINTH PLAN PROJECTION PROFILE FOR CRUDE OIL AND NATURAL GAS PRODUCTION

Company/areas	1997-98*	1998-99	1999-00	2001-01	2001-02	1997-2002
CRUDE OIL PRODUCTION (Mn. Tonnes)						
A. ONGC						
1. ONSHORE						
WRBC	6.880	7.060	7.260	7.300	7.360	35.860
ERBC	2.458	2.602	2.698	2.837	2.904	13.499
SRBC	0.235	0.192	0.184	0.172	0.165	0.948
TOTAL	9.573	9.854	10.142	10.309	10.429	50.307
2. OFFSHORE						
MRBC	18.160	18.238	18.898	19.422	19.449	94.167
SRBC	-	-	0.140	0.140	0.140	0.420
TOTAL OFFSHORE	18.160	18.238	19.038	19.562	19.589	94.587
TOTAL ONGC	27.733	28.092	29.180	29.871	30.018	144.894
B. OIL						
Assam & Arunachal Pradesh	3.100	3.200	3.390	3.380	3.500	16.470
C. JV/PRIVATE OPERATORS	**3.590**	**4.400**	**4.080**	**3.930**	**3.460**	**19.460**
GRAND TOTAL (A+B+C)	**34.423**	**35.692**	**36.550**	**37.181**	**36.978**	**180.824**
NATURAL GAS PRODUCTION (BASE CASE) (MMSCMD)						
A. ONGC						
1. ONSHORE						
WRBC	10.080	10.330	9.790	9.260	9.050	17.716
ERBC	1.664	1.752	1.897	1.935	1.942	3.356
CRBC	0.903	0.903	0.903	0.903	0.903	1.490
SRBC	2.530	2.564	2.609	2.616	2.616	4.724
TOTAL ONSHORE	15.177	15.549	15.199	14.714	14.511	27.286
2. OFFSHORE						
MRBC	47.577	48.264	50.293	50.579	54.432	91.645
SRBC	-	-	0.100	0.100	0.100	0.100
TOTAL OFFSHORE	47.577	48.264	50.293	50.579	54.532	91.755
TOTAL ONGC	62.754	63.813	65.492	65.293	69.043	119.041
B. OIL	**5.600**	**6.330**	**7.190**	**7.810**	**8.280**	**12.859**
C. JV/PRIVATE OPERATORS	**6.730**	**7.260**	**6.980**	**6.820**	**6.790**	**12.629**
GRAND TOTAL (A+B+C)	**75.084**	**77.403**	**79.662**	**79.923**	**84.113**	**144.528**

Source: Draft Report—Ninth Five Year Plan.

XV. 3. DEMAND FOR PETROLEUM PRODUCTS

Items	1990-91	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10
Demand for Petroleum Products (MMT)	55.04	67.37	74.67	79.17	84.29	90.56	97.09	99.6	100.4
Annual Growth Rate%	1.7	10.8	10.8	6.0	6.5	7.4	7.2	2.6	0.8
Share of Middle Distillates (%)	60.2	60.8	60.9	61.5	60.0	67.5	56.3	53.1	50.4

Source Plan Document MMT: Million Metric Tonnes

XV. 4. IMPORT AVAILABILITY RATIOS OF CRUDE OIL & PETROLEUM PRODUCTS

(Million tonnes)

Items	1990-91	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10
A. CRUDE OIL									
(i) Production	33.02	32.24	35.17	32.90	33.86	32.72	31.95	32.43	32.03
(ii) Imports	20.70	27.35	27.34	33.91	34.49	39.81	57.81	72.10	78.71
(iii) Availability (Net)	53.72	59.59	62.51	66.81	68.85	72.53	89.76	106.53	110.74
(iv) Item (ii) as % of item (iii)	38.53	45.90	43.74	50.76	50.46	54.89	64.41	69.56	71.08
B. PETROLEUM PRODUCTS									
(i) Production†	49.49	54.35	56.80	60.79	60.10	66.75	81.40	97.696	102.209
(ii) Imports	8.66	13.95	20.34	20.26	20.59	23.05	15.86	0.90	3.056
(iii) Availability (Gross)	58.15	68.30	77.14	81.05	83.69	89.80	97.26	98.598	99.153
(iv) Item (ii) as % of item (iii)	14.89	20.42	26.37	25.00	24.6	25.7	16.3	0.9	3.1

†Includes LPG Production from Natural Gas

XV.5. VALUE* OF CRUDE OIL & POL PRODUCTS IMPORTED DURING V,VI,VII,VIII AND IX FIVE YEAR PLAN PERIODS

Plan Period/Year	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
IX-th Plan 1997-98—2001-02	238098

*Net of POL Imports.

XV.6 Xth PLAN PROJECTION PROFILE FOR CRUDE OIL AND NATURAL GAS PRODUCTION

Company	2002-03	2003-04	2004-05	2005-06	2006-07	TOTAL
			Crude Oil (MMT)			
ONGC	25.90	25.99	26.38	26.19	25.56	130.02
OIL	3.50	3.60	3.75	3.85	4.00	18.70
Joint Venture Private Companies	3.68	3.55	3.53	3.08	2.68	16.52
TOTAL	**33.08**	**33.14**	**33.66**	**33.12**	**33.24**	**165.24**
			Natural Gas (MMSCMD)			
						(BCM)
ONGC	65.50	63.37	62.22	18.84	58.83	112.10
OIL	6.01	6.41	6.61	7.69	7.80	12.61
Joint Venture Private Companies	15.05	19.31	26.62	26.62	29.40	42.72
TOTAL	**86.56**	**89.09**	**95.45**	**93.14**	**94.23**	**167.43**

Source: Draft Tenth Five Year Plan Document BCM : Billion Cubic Meters

XV. 7 PRODUCT AVAILABILITY DURING THE TENTH PLAN

(000' Tonnes)

Product	2002-03	2003-04	2004-05	2005-06	2006-07	TOTAL
LPG	7545	7989	8823	8649	8635	41741
MS	10478	10994	11470	11676	11580	56198
Naphtha	11878	13447	13753	13521	13333	65932
Other Light Ends	4392	4627	4867	4865	4857	23608
ATF	3621	4367	4763	4787	4717	22255
SKO	13966	14656	15062	15110	14944	73738
HSD	47258	51921	57625	58007	57593	272404
LDO	877	701	570	570	545	3263
Other Middle Distilates	529	499	503	502	497	2530
Lubes	836	900	900	882	850	4368
LSHS	4574	4206	3518	3468	3491	19217
FO	7576	7841	7128	6037	5963	34545
Bitumen	3239	3175	3112	3090	3061	15677
Other Heavy Ends	3342	4121	5257	6008	5940	24668
TOTAL	**120111**	**129444**	**137351**	**137272**	**135966**	**660144**

Source: Draft Tenth Five Year Plan Document.

XV.8 REFINERY-WISE CAPACITY ADDITION DURING THE TENTH PLAN

YEAR	Refinery	MMT
2002-03	Barauni Expansion(PSU)	1.80
	Haldia Expansion (PSU)	1.40
	HPCL Mumbai Expansion (PSU)	0.33
	CPCL, Nagapatinam Expansion(PSU)	0.50
	RPL Expansion	6.00
	Essar Oil (Pvt.)	10.50
	Sub Total	**20.53**
2003-04	Koyali Expansion (PSU)	4.30
	Panipat Expansion (PSU)	6.00
	BPCLExpansion (PSU)	5.10
	Channai Expansion (PSU)	3.00
	BRPL Expansion (PSU)	0.35
	IOC, Paradip (PSU)	9.00
	Essar Oil Expansion (Pvt.)	1.50
	Nagarjuna Oil (Pvt.)	6.00
	Sub Total	**35.25**
2004-05	Kochi Expansion (PSU)	6.00
	Sub Total	6.00
2005-06	Essar Oil Expansion (Pvt.)	12.00
	RPL Expansion (Pvt.)	17.00
	Bhatinda(PSU)	9.00
	Sub Total	**38.00**
2006-07	BRPL Expansion (PSU)	0.30
	Bina (JVC)	6.00
	Sub Total	**6.30**
	TOTAL	**106.08**

REFINING CAPACITY ADDITION DURING THE TENTH PLAN

YEAR	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	Total
Capacity Addition	**Base Year**	**20.530**	**35.250**	**6.000**	**38.000**	**6.300**	**106.080**
Total Capacity	**114.668**	**135.198**	**170.448**	**176.448**	**214.448**	**220.748**	

Source: Draft Tenth Five Year Plan Document.

XV. 9 CRUDE OIL PROCESSING AND IMPORT DURING THE TENTH PLAN

(TMT)

	2002-03	2003-04	2004-05	2005-06	2006-07	Tenth Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Processing						
Total	124526	134947	144547	144577	143377	691974
Indigenous	29843	30031	31534	31394	30904	153706
Imported	94683	104916	113013	112483	112473	538268
High Sulphur	70499	79880	90030	90224	89610	420243
Low Sulphur	24184	25036	22983	22959	22863	118025
Imports						
High Sulphur	70853	80281	90482	90677	90060	422353
Low Sulphur	24306	25162	23098	23074	22978	118618
Total	95159	105443	113580	113751	113038	540971

XV.10 VALUE OF IMPORT OF CRUDE OIL AND PETROLEUM PRODUCTS DURING THE TENTH PLAN PERIOD

(Million US Dollars)

	2002-03	2003-04	2004-05	2005-06	2006-07	Tenth Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)
CRUDE OIL—Import (Overseas Production)						
Low Sulphur	3386	3505	3218	3214	3201	16524
High Sulphur	9870	11183	12604	12631	12545	58833
Gross Crude oil	13256	14688	15822	15845	15746	75357
Overseas production	(32)	(84)	(113)	(344)	(843)	(1416)
Net Crude oil	**13224**	**14604**	**15709**	**15501**	**14903**	**73941**
PRODUCT—Import (Export)						
LPG	272	339	329	519	724	2183
Naphtha	(138)	(368)	(695)	(599)	(559)	(2359)
MS	(439)	(429)	(407)	(344)	(228)	(1847)
ATF	(196)	(302)	(352)	(343)	(318)	(1511)
HSD	(1005)	(1416)	(1924)	(1630)	(1168)	(7143)
FO/LSHS	44	109	294	449	512	1408
LUBES	128	121	134	161	188	732
Others	(184)	(254)	(352)	(405)	(400)	(1595)
Product-exports	**(1518)**	**(2200)**	**(2973)**	**(2192)**	**(1249)**	**(10132)**
NET IMPORT	**11706**	**12404**	**12736**	**13309**	**13654**	**63809**

Source: Draft Tenth Five Year Plan Document

XV. 11 ESTIMATES OF DEMAND OF PETROLEUM PRODUCTS DURING THE TENTH PLAN

(TMT)

PRODUCTS	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	CARG
1	2	3	4	5	6	7	8
			BASE CASE SCENARIO				
LPG	8055	8776	9528	10310	11123	11966	8.2
Naphtha	10928	10823	10723	8668	9128	9228	-3.5
MS(R)	6910	7460	8042	8653	9259	9907	7.5
MS(D)	160	160	160	160	160	160	0.0
MS(T)	7070	7620	8202	8813	9419	10067	7.3
ATF	2299	2370	2445	2523	2605	2691	3.2
SKO	11000	11000	11000	11000	11000	11000	0.0
HSD(R)	30663	32505	34325	36179	38096	40115	5.5
HSD(D)	9152	9641	10183	10787	11459	12209	5.9
HSD(T)	39815	42146	44508	46966	49555	52324	5.6
LDO	1500	1500	1500	1500	1500	1500	0.0
FO	7081	7397	7733	8089	8466	8866	4.6
LSHS	5787	5787	5787	5787	5787	5787	0.0
FO/LSHS	12868	13184	13520	13876	14253	14653	2.6
Bitumen	2726	2808	2892	2979	3069	3161	3.0
Lub/Gr.	1103	1202	1245	1283	1342	1386	4.7
Others	5668	5668	5668	5668	5668	5668	0.0
Total	**103032**	**107097**	**111231**	**113586**	**118662**	**123644**	**3.7**
			UPPER CASE SCENARIO				
LPG	8055	8776	9528	10310	11123	11966	8.2
Naphtha	10928	13696	13806	11751	12980	13380	3.5
MS(R)	6910	7563	8275	9054	9904	10833	9.4
MS(D)	160	160	160	160	160	160	0.0
MS(T)	7070	7723	8435	9214	10064	10993	9.2
ATF	2299	2414	2535	2661	2794	2934	5.0
SKO	11000	11000	11000	11000	11000	11000	0.0
HSD(R)	30663	32932	35369	37986	40797	43816	7.4
HSD(D)	9152	9729	10341	10993	11686	12422	6.3
HSD(T)	39815	42661	45711	48979	52483	56238	7.2
LDO	1500	1500	1500	1500	1500	1500	0.0
FO	7230	7719	8251	8831	9464	10153	7.0
LSHS	5787	5787	5787	5787	5787	5787	0.0
FO/LSHS	13017	13506	14038	14618	15251	15940	4.1
Bitumen	2779	2918	3064	3217	3378	3547	5.0
Lub/Gr.	1103	1202	1245	1283	1342	1386	4.7
Others	5668	5668	5668	5668	5668	5668	0.0
TOTAL	**103234**	**111063**	**116530**	**120202**	**127584**	**134553**	**5.4**

Source: Draft Tenth Fiver Year Plan Document.

PART-IV
FINANCIAL
PERFORMANCE/STRUCTURE

PART-IV
FINANCIAL
PERFORMANCE/STRUCTURE

XVI. 2 CAPITAL STRUCTURE OF OIL PSUs

(Rs. crores)

S. No.	Name of the PSU	Authorised Capital	Paid up Capital	Equity held by Govt.	% Govt. holding as on 31-3-01	% Govt. holding as on 31-3-02
1	IOCL	2500.00	778.67	638.74	82.03	82.03
2	BPCL	300.00	300.00	198.60	66.20	66.20
3	HPCL	350.00	339.00	172.92	51.01	51.01
4	ONGC	15000.00	1425.93	1199.35	84.11	84.11
5	OIL	250.00	214.00	210.00	98.13	98.13
6	GAIL	1000.00	845.65	569.55	67.35	67.35
7	KRL	150.00	138.17	0.00	0.00	0.00
8	BRPL	200.00	199.82	148.80	74.46	00
9	EIL	100.00	56.16	50.77	90.40	90.40
10	CPCL	200.00	149.00	0.00	0.00	0.00
11	IBP	100.00	22.15	13.20	59.58	26.00
12	Biecco L Ltd	50.00	42.00	23.94	57.00	57.00
13	Balmer L Ltd	30.00	16.29	0.00	0.00	0.00
14	NRL	1000.00	735.63	0.00	0.00	0.00

CPCL is subsidiary of IOC
IBP is subsidiary company of IOC
NRL is subsidiary of BPCL
BRPL is a subsidiary of IOC
KRL is subsidiary of BPCL

XVI. 3 STATEMENT SHOWING PROFIT AFTER TAX EARNED BY OIL PUBLIC SECTOR COMPANIES.

(in Rs. Crores)

S. No.	Name of PSUs	Profit after tax during				
		1997-98	1998-99	1999-00	2000-01	2001-02
1	Indian Oil Corporation Ltd.	1706.50	2213.52	2443.40	2720.33	2884.66
2	Bharat Petroleum Corporation Ltd.	532.70	701.23	703.86	820.12	849.83
3	Hindustan Petroleum Corporation Ltd.	701.16	901.26	1057.41	1088.01	787.98
4	Oil& Natural Gas Corporation Ltd.	2677.78	2754.49	3629.48	5228.78	6197.88
5	Oil India Ltd.	288.84	291.60	409.79	467.36	525.22
6	Gas Authority of India Ltd.	1020.31	1059.92	861.27	1126.16	1185.83
7	Kochi Refineries Ltd.	220.41	338.23	235.20	109.46	68.77
8	Bongaigaon Refinery & Petrochemicals Ltd.	67.99	34.26	32.24	-57.44	-198.61
9	Engineers India Ltd.	73.24	117.77	126.20	123.85	24.71
10	Chennai Petroleum Corporation Ltd.	129.28	204.93	143.14	122.43	63.71
11	IBP Co. Ltd.	31.56	35.23	41.71	54.22	195.79
12	Balmer Lawrie & Co. Ltd.	16.41	16.83	14.32	6.01	8.01
13	Numaligarh Refineries Ltd.	*	*	*	21.60	122.98
14	Biecco Lawrie Co. Ltd.	-4.88	0.45	0.17	(-)7.29	-10.90

* NRL refinery was commissioned in the year 2000-01.

XVI. 4 PERFORMANCE OF OIL PSUS DURING 2001-02

Sl. No.	Performance parameters (as on 31-3-2002)	Unit	ONGC	OIL	GAIL	IOCL	HPCL	BPCL	EIL	BRPL	CPCL	IBP	NRL	Balmer	Biecco	KRL
1	Authorised Capital	Crores	1500.00	250.00	1000.00	2500.00	350.00	300.00	100.00	200.00	200.00	100.00	100.00	30.00	50.00	150.00
2	Paid up Captial	Crores	1425.93	214.00	845.65	778.67	339.00	300.00	56.16	199.82	149.00	22.15	735.63	16.29	42.00	138.47
3	% of Shareholding by															
	Govt.	%	84.11	98.13	67.35	82.03	51.01	66.20	90.40	Nil	Nil	26.00	-	61.80	57.37	0.00
	Employees	%	15.89	1.87	0.04	2.31	0.49	1.42	9.60	25.54	0.14	0.66	-	0.85	Nil	0.08
	Other/CPSs	%	0	Nil	32.61	15.54	48.50	32.38	0.00	74.46	99.86	73.34	87.65	37.33	42.63	94.86
	State Govt.	%	0	Nil	-	0.12	0.00	0.00	Nil	-	Nil	-	12.35	0.02	Nil	5.06
4	Gross Turmover	Crores	23857.40	1896.04	10763.00	114863.95	45287.00	42294.28	536.99	1194.95	6273.09	8456.26	2261.28	755.65	43.12	6758.25
5	Net worth	Crores	29511.84	3441.67	5333.00	15311.03	5898.00	3997.38	727.83	301.60	1031.90	446.03	929.07	179.94	-10.93	1137.90
6	Reserves and Surplus	Crores	28296.25	3227.67	4490.00	14532.36	5559.00	3697.38	671.68	105.36	882.90	423.88	199.76	136.89	0.31	999.43
7	Internal resources generated	Crores	6845.00	956.91	1779.00	3420.47	978.00	1099.76	33.10	164.41	148.47	208.51	46.21	24.61	0.78	176.29
8	Profit Before Tax	Crores	9855.22	803.22	1802.00	4599.40	1222.00	1326.78	112.46	-309.26	88.89	289.95	133.32	8.01	-10.90	118.58
9	Profit After Tax	Crores	6197.88	525.22	1185.83	2884.66	787.98	849.83	17.50	-198.61	63.71	195.78	122.98	9.20	-10.90	68.77
10	Gross block (fixed assets and producing property)	Crores	21981.22	1966.11	10702.00	29740.61	10245.00	9280.61	118.30	832.40	2107.22	793.89	2584.97	253.35	15.63	2150.11
11	Inventory holding/ Closing stock	Crores	1452.61	21.88	424.00	10454.55	3628.00	2912.09	NA	235.74	757.43	319.19	207.05	57.93	3.83	611.29
12	Debt-Equity ratio		0.10:1	1:11.83	0.45:1	1.25:1	0.18:1	0.86	Nil	63.43	1.22	-	1.55:1	1.00	0.55:1	0.62:1
13	Earning Per Share	In Rs.	43.47	24.54	14.02	37.05	23.26	28.33	4.40	-9.94	4.28	86.39	1.67	4.92	NA	4.97
14	Block Value	In Rs.	207.00	160.82	63.10	196.63	173.80	133.25	129.60	15.09	69.19	201.37	12.63	110.46	NA	82.18
15	Total dividend amount	Crores	1996.31	160.50	380.54	856.54	339.33	330.00	15.44	Nil	29.80	22.15	37.52	2.93	Nil	30.53
16	Dividend as a % PAT	%	32.31	30.55	32.09	29.69	43.00	38.83	88.23	Nil	46.77	11.31	30.51	36.58	Nil	44.00

XVII. I: PRODUCTION OF PRIMARY SOURCES OF CONVENTIONAL ENERGY IN INDIA

Year	Coal & lignite (000'tonnes)	Crude petroleum (000'tonnes)	Natural gas (million cubic metres)	Electricity Hydro & nuclear (gwh)
1	2	3	4	5
1970-71	76340	6822	1445	27666
1971-72	76140	7299	1535	29214
1972-73	80110	7321	1565	28329
1973-94	81490	7189	1713	31368
1974-75	91350	7684	2041	30081
1975-76	102660	8448	2368	35928
1976-77	105010	8898	2428	38088
1977-78	104560	10763	2839	40279
1978-79	105250	11633	2812	49929
1979-80	106840	11766	2767	48354
1980-81	119020	10507	2358	49543
1981-82	131240	16194	3851	52586
1982-83	137530	21063	4936	50396
1983-84	147539	26020	5961	53500
1984-85	155277	28990	7241	58023
1985-86	162336	30168	8134	56003
1986-87	175290	30480	9853	58862
1987-88	192551	30357	11467	52479
1988-89	208820	32040	13217	63690
1989-90	215724	34087	16988	66741
1990-91	228131	33021	17998	77782
1991-92	248805	303446	18645	78282
1992-93	258616	26950	18060	76595
1993-94	266785	27026	18335	75851
1994-95	277080	32239	19381	88360
1995-95	295561	35167(r)	22639	80561
1996-97	308720	32900	23255	77972
1997-98	320221	33858	26401	84665
1998-99	315689	32722(r)	27428	94846
1999-00	322168	31949	28446	93895
2000-01	336643(r)	32426	29477	91409
2001-02	352601	32032	29714	93260

(p)- Provisional (r)- Revised
gwh=gigawatt hour=10 Kilowatt hour

XVII. 2: AVAILABILITY OF PRIMARY SOURCES OF CONVENTIONAL ENERGY IN INDIA

Year	Coal & lignite (000'tonnes)	Crude petroleum (000'tonnes)	Natural gas (million cubic metres)	Electricity Hydro & nuclear (gwh)
1	2	3	4	5
1970-71	71240	18505	647	27665
1971-72	74070	20250	718	29231
1972-73	78210	19450	771	28329
1973-74	77680	21044	762	31368
1974-75	85600	21700	951	30081
1975-76	92170	22072	1124	35928
1976-77	100100	22522	1381	38088
1977-78	103840	25270	1464	40279
1978-79	100160	26290	1711	49929
1979-80	105540	27887	1676	48354
1980-81	109320	26755	1522	49543
1981-82	121020	30654	2222	52586
1982-83	130138	33460	2957	50394
1983-84	139302	36465	3399	53500
1984-85	141458	36154	4141	58023
1985-86	155536	44784	4950	56003
1986-87	166846	45956	7072	58862
1987-88	180645	48089	7968	52479
1988-89	193970	49855	9250	63685
1989-90	209481	53577	11172	66761
1990-91	214987	53720	12766	77782
1991-92	232338	54340	14441	78281
1992-93	245255	56197	16116	76596
1993-94	256327	57848	16340	75860
1994-95	269180	59588	17338	88360
1995-96	284043	62510	21202	80561
1996-97	298621	66806	21495	77972
1997-98	306824	68352	24522	84665
1998-99	310738	72531	25716	94845
1999-00	315047	89754(r)	26886	93895(p)
2000-01	341220(r)	106523(r)	27860(r)	91409(p)
2001-02(p)	349761	110738	28037	93260

(p)- Provisional (r)- Revised
gwh=gigawatt hour+10 Kilowatt hour
Thermal electricity is not considered as primary source of energy.

XVII. 3: CONSUMPTION OF PRIMARY SOURCES OF CONVENTIONAL ENERGY IN INDIA

Year	Coal & lignite (000'tonnes)	Crude petroleum** (000'tonnes)	Natural gas (million cubic metres)	Electricity (gwh)
1	2	3	4	5
1970-71	71230	18379	647	43724
1971-72	74060	20042	718	47063
1972-93	78180	19328	771	49088
1973-74	77660	20958	762	50246
1974-75	85580	21094	951	52632
1975-76	92160	22283	1124	60246
1976-77	104130	22995	1381	66609
1977-78	103780	24898	1464	69255
1978-79	100150	25974	1711	77293
1979-80	105530	27474	1674	78084
1980-81	109310	25836	1522	82367
1981-82	121010	30146	2222	90245
1982-83	130130	33156	2957	95589
1983-84	137290	35263	3399	102344
1984-95	141450	35556	4141	114068
1985-86	155530	42910	4950	122999
1986-97	166840	45699	7072	135952
1987-88	179209	47754	7968	145613
1988-89	192119	48803	9250	160196
1989-90	203424	51942	11172	175419
1990-91	213360	51772	12766	190357
1991-92	232330	51423	14441	207645
1992-93	241750	53482	16116	220674
1993-94	256320	54296	16340	238567
1994-95	269174	56534	17338	259630
1995-96	284037	58741	21202	277029
1996-97	298620	62870	21495	280206
1997-98	306824	65166	24522	296749
1998-99	313476	68538	25716	309734
1999-00	315047	85964	26886	312841
2000-01	341220(r)	103444	27860(r)	315716
2001-02(p)	349761	107274	28037	N.A.

(p)- Provisional (r)- Revised
gwth= gigawatt hour=10 Kilowatt hour
N.A.= Data not available
*Includes thermal, hydro & nuclear electricity in utilities.
**Crude oil in terms of refinery crude throughput.

XVII.4. DOMESTIC PRODUCTION OF PETROLEUM PRODUCTS IN INDIA

(000'tonnes)

Year	Light distillates			Middle distillates			
	Liquefied petroleum gas@	Motor gaso-line	Naphtha	Kerosene	Aviation turbine fuel	High speed diesel oil	Light diesel oil
1	2	3	4	5	6	7	8
1970-71	169	1526	1205	2896	710	3840	986
1971-72	195	1615	1217*	2995	808	4356	1065
1972-73	227	1581	1330*	2813	801	4598	1010
1973-74	259	1647	1438*	2613	875	5039	1079
1974-75	278	1298	1720	2052	837	6034	1084
1975-76	331	1275	1910	2439	925	6285	946
1976-77	363	1340	1986	2581	1001	6399	1047
1977-78	383	1423	2120	2450	1077	7129	1224
1978-79	403	1515	2262	2514	1177	7350	1227
1979-80	406	1512	2415	2539	1104	7975	1230
1980-81	366	1519	2115	2396	1001	7371	1108
1981-82	410	1614	3004	2907	1009	9042	949
1982-83	406	1797	2986	3393	1137	9761	1121
1983-84	514	1937	3578	3528	1195	10862	1081
1984-85	596	2144	3470	3364	1297	11086	1253
1985-86	867	2309	4955	4030	1519	14624	1177
1986-87	995	2515	5437	4912	1553	15450	1172
1987-88	1026	2662	5462	5104	1695	16296	1259
1988-89	1034	2822	5378	5201	1753	16656	1468
1989-90	1179	3328	5227	5700	1575	17737	1540
1990-91	1221	3552	4859	5471	1801	17185	1509
1991-92	1250	3420	4546	5339	1539	17404	1482
1992-93	1249	3709	4586	5199	1636	18289	1453
1993-94	1314	3843	4666	5270	1788	18809	1474
1994-95	1432	4129	5662	5261	1968	19593	1364
1995-96	1539	4462	5975	5267	2127	29661	1351
1996-97	1598	4704	6123	6236	2119	22202	1286
1997-98	1666	4849	6103	6701	2147	23354	1246
1998-99	1724	5573	6081	5341	2289	26716	1246
1999-00	2487	6232	8170	5735	2292	34793	1624
2000-01	4088	8070	9908	8714	2513	39015	1481
2001-02(p)	4778	9699	9180	9681	2595	39773	1703

(p)_Provisional
@ Excludes LPG production from natural gas.
*Estimated from calendar year figures.

XVII.4. DOMESTIC PRODUCTION OF PETROLEUM PRODUCTS IN INDIA (CONCLD.)

(000'tonnes)

Year	Heavy ends				Others**	Total
	Fuel oil	Lubricants	Petroleum	Bitumen coke		
1	9	10	11	12	13	14
1970-71	4090	231	151	805	501	17110
1971-72	4098	140*	142*	1009*	999	18639
1972-73	3688	304*	132*	1109*	267	17860
1973-74	3931	318*	131*	1093*	1072	19495
1974-75	4243	387	137	873	668	19611
1975-76	5083	342	160	697	436	20829
1976-77	4728	368	163	945	471	21432
1977-78	5332	413	155	992	521	23219
1978-79	5644	490	122	962	527	24193
1979-80	6351	487	99	1103	573	25794
1980-81	6120	426	86	1082	533	24123
1981-82	6908	407	141	1298	493	28182
1982-83	7964	434	149	1397	528	31073
1983-84	8000	470	136	1069	556	32926
1984-85	7886	414	181	944	601	33236
1985-86	7955	501	192	1107	645	39881
1986-87	8011	491	264	1224	737	42761
1987-88	8466	478	257	1370	653	44728
1988-89	8171	497	275	1548	896	45699
1989-90	8952	547	275	1671	959	48690
1990-91	9429	561	229	1603	1142	48562
1991-92	9632	390	216	1710	1416	48439
1992-93	10403	533	221	1862	1219	50359
1993-94	10304	489	233	1874	1020	51084
1994-95	9822	504	259	1845	1088	52927
1995-96	9579	633	256	2032	1199	55081
1996-97	10298	619	246	2283	1291	59005
1997-98	11080	593	282	2158	1129	61308
1998-99	11030	586	286	2419	1163	64544
1999-00	11352	728	465	2485	3048	79411
2000-01	11392	684	2473	2721	4555	95614
2001-02(p)	12227	651	2784	2561	4372	100004

(p)-Provisional
*Estimated from calendar year figures
**Includes those of light distillates, middle distillates and heavy ends, through private parties.

XVII. 5 : FOREIGN TRADE IN CRUDE OIL AND PETROLEUM PRODUCTS IN INDIA

(000'tonnes)

Year	Crude oil			Petroleum		
	Gross Imports	Exports	Net imports	Gross imports	Exports	Net imports
1	2	3	4	5	6	7
1970-71	11683	—	11683	1084	332	752
1971-72	12951	—	12951	2147	136	2011
1972-73	12084	—	12084	3525	126	3399
1973-74	13873	18	13855	3548	161	3787
1974-75	14016	—	14016	2648	175	2473
1975-76	13624	—	13624	2218	170	2048
1976-77	14048	—	14048	2624	74	2550
1977-78	14507	—	14507	2879	47	2832
1978-79	14657	—	14657	3878	44	3834
1979-80	16121	—	16121	4724	88	4636
1980-81	16248	—	16248	7289	36	7253
1981-82	15298	838	14460	4884	55	4829
1982-83	16949	4552	12397	5028	795	4233
1983-84	15967	5522	10445	4328	1472	2856
1984-85	13642	6478	7164	6092	933	5159
1985-86	15144	528	14616	3865	1963	1902
1986-87	15476	—	15476	3047	2491	556
1987-88	17734	—	17734	4151	3412	739
1988-89	17815	—	17815	6495	2295	4200
1989-90	19490	—	19490	6564	2593	3971
1990-91	20699	—	20699	8660	2648	6012
1991-92	23994	—	23994	9445	2936	6509
1992-93	29247	—	29247	11283	3719	7564
1993-94	30822	—	30822	12076	4034	8042
1994-95	27349	—	27349	13951	3254	10697
1995-96	27342	—	27342	20335	3435	16900
1996-97	33906	—	33906	20265	3162	17103
1997-98	34493(r)	—	34493(r)	22970(r)	2381(r)	20589(r)
1998-99	39808	—	39808	23772(r)	720(r)	23052(r)
1999-00	57805(r)	—	57805(r)	16608(r)	746(r)	15862(r)
2000-01	74097(r)	—	74097(r)	9267(r)	8365(r)	902(r)
2001-02(p)	78706	—	78706	7009	10065	-3056

(p)-Provisional (r)-Revised

XVII. 6: AVAILABILITY OF CRUDE OIL AND PETROLEUM PRODUCTS IN INDIA

(000'tonnes)

Year	Crude oil			Petroleum products		
	Production	Net imports	Gross availability	Production	Net imports	Gross availability
1	2	3	4	5	6	7
1970-71	6822	11683	18505	17110	752	17862
1971-72	7299	12951	20250	18639	2011	20650
1972-73	7321	12084	19405	17830	3399	21229
1973-74	7189	13855	21044	19495	3387	22882
1974-75	7684	14016	21700	19603	2473	22076
1975-76	8448	13624	22072	20829	2048	22877
1976-77	8898	14048	22946	21432	2550	23982
1977-78	10763	14507	25270	23219	2832	26051
1978-79	11633	14657	26290	24193	3834	28027
1979-80	11766	16121	27887	25794	4636	30430
1980-81	10507	16248	26755	24123	7253	31376
1981-82	16194	14460	30654	28182	4829	33011
1982-83	21063	12397	33460	31073	4233	35306
1983-84	26020	10445	36465	32926	2856	35782
1984-85	28990	7164	36154	33236	5159	38395
1985-86	30168	14616	44784	39881	1902	41783
1986-87	30480	15476	45956	42761	556	43317
1987-88	30357	17734	48091	44728	739	45467
1988-89	32040	17815	49855	45699	4200	49899
1989-90	34087	19490	53577	48690	3971	52661
1990-91	33021	20699	53720	48562	6012	54574
1991-92	30346	23994	54340	48349	6509	54858
1992-93	26950	29247	56197	50359	7564	57923
1993-94	27026	30822	57848	51084	8042	59126
1994-95	32239	27349	59588	52927	10697	63624
1995-96	35167(r)	27342	62509(r)	55081	16900	71981
1996-97	32900	33906	66806	59005	17103	76108
1997-98	33858	34493(r)	68351(r)	61308	20589(r)	81897(r)
1998-99	32722(r)	39808	72530(r)	64544	23052(r)	87596(r)
1999-00	31949(r)	57805	89754(r)	79411	15862(r)	95273(r)
2000-01	32426	74097(r)	106523(r)	95614	902(r)	96516(r)
2001-02(p)	32032	78706	110738	100004	-3504	96500

(p)-Provisional

XVII.7. CONSUMPTION OF PETROLEUM PRODUCTS IN INDIA

(000'tonnes)

Year	Light distillates			Middle distillates			
	Liquified petroleum gas	Motor gasoline	Naphtha	Kerosene	Aviation turbine fuel	High speed diesel oil	Light diesel oil
1	2	3	4	5	6	7	8
1970-71	176	1453	904	3283	689	3837	1092
1971-72	212	1527	1164	3517	758	4340	1200
1972-73	244	1592	1297	3516	816	4770	1436
1973-74	269	1507	1534	3294	778	5404	1278
1974-75	289	1264	1713	2828	836	6950	1070
1975-76	336	1275	1836	3104	897	6595	878
1976-77	368	1316	2196	3322	956	7106	1082
1977-78	391	1391	2290	3634	1041	7736	1164
1978-79	408	1499	2515	3952	1154	8638	1216
1979-80	410	1490	2413	3872	1144	9801	1266
1980-81	405	1522	2325	4228	1125	10345	1122
1981-82	492	1599	2963	4693	1128	10832	1036
1982-83	601	1722	2958	5214	1145	12013	1067
1983-84	764	1891	2804	5524	1208	12600	1097
1984-85	953	2084	3125	5959	1336	13696	1198
1985-86	1241	2275	3106	6229	1453	14886	1123
1986-87	1497	2505	3249	6645	1603	16009	1156
1987-88	1686	2810	2852	7231	1654	17657	1245
1988-89	1962	3052	3364	7731	1713	18795	1437
1989-90	2268	3491	3350	8239	1775	20706	1486
1990-91	2415	3545	3446	8423	1677	21139	1506
1991-92	2650	3573	3461	8377	1559	22680	1462
1992-93	2866	3595	3382	8478	1565	24293	1407
1993-94	3113	3834	3191	8704	1741	25872	1370
1994-95	3434	4141	3400	8964	1903	28261	1369
1995-96	3849	4679	3669	9317	2082	32254	1311
1996-97	4184	4955	4015	9646	2158	35019	1223
1997-98	4581	5182	4716	9878	2108	36071	1235
1998-99	5041	5507	6652	10599	2112	37217	1278
1999-00	6029	5909	7970	10731	2197	39287	1512
2000-01(r)	6613	6613	8059	10714	2249	37938	1399
2001-02(p)	7280	6993	7886	10089	2254	36230	1183

(p)-Provisional (r)-Revised

Cont'd...

XVII.7. CONSUMPTION OF PETROLEUM PRODUCTS IN INDIA (Concld.)

(000'tonnes)

Year	Heavy ends				Refinery Fuel	Others*	Total
	Fuel oil	Lubricants	Bitumen	Petroleum coke			
1	9	10	11	12	13	14	15
1970-71	4664	545	777	107	1223	385	19135
1971-72	5142	362	1011	188	1228	650	21299
1972-73	5661	609	1109	141	1262	525	22978
1973-74	5912	612	1066	139	1229	552	23574
1974-75	5729	475	399	89	1197	463	23302
1975-76	5781	441	690	151	1226	463	23673
1976-77	5733	454	882	175	1299	511	25400
1977-78	5839	478	908	146	1451	521	26990
1978-79	6668	544	943	155	1478	549	29719
1979-80	7081	566	1069	185	1440	586	31323
1980-81	7473	593	1064	137	1365	557	32261
1981-82	7184	592	1292	174	1584	538	34107
1982-83	7301	605	1379	103	1738	549	36395
1983-84	7558	617	1050	114	1935	632	37776
1984-85	7944	664	935	234	2033	667	40828
1985-86	7900	700	1126	163	2491	670	43363
1986-87	8047	755	1309	208	2612	679	46274
1987-88	8144	791	1379	246	2522	721	48938
1988-89	8456	847	1498	316	2790	921	52882
1989-90	8820	926	1695	383	2684	956	56779
1990-91	8986	892	1581	290	2710	1135	57745
1991-92	9202	932	1706	266	2629	1106	59603
1992-93	9267	846	1823	152	2753	1228	61655
1993-94	9192	688	1824	132	2836	1151	63648
1994-95	9889	688	1939	197	3137	3188	70510
1995-96	10685	711	2005	319	3238	3789	77908
1996-97	10847	705	2273	276	3490	3867	82658
1997-98	10974	835	2178	227	3514	6305	87804
1998-99	11304	885	2412	315	3712	7240	94274
1999-00	11579	915	2879	328	5544	6954	101834
2000-01	11360	797	2618	414	6900	10850	106524
2001-02(p)	11169	808	2786	358	7273	10844	105153

(p)-Provisional

*Includes those of light distillates, middle distillates and heavy ends and imports through private parties.

XVII. 8. SECTOR-WISE (END USE) CONSUMPTION OF SELECTED PETROLEUM PRODUCTS IN INDIA

(000'Tonnes)

Petroleum product	Year	Transport	Plantation	Power generation	Industry	Misce-llaneous services	Total
1	2	3	4	5	6	7	8
High Speed Diesel Oil	1984-85	11839	128	140	1122	467	13696
	1985-86	12880	149	160	1263	434	14886
	1986-87	14008	155	161	1293	392	16009
	1987-88	15360	177	209	1500	411	17657
	1988-89	16822	94	132	1300	395	18743
	1989-90	18341	201	126	1512	457	20637
	1990-91	18813	318	104	1431	473	21139
	1991-92	20282	346	110	1416	526	22680
	1992-93	21726	388	108	1489	582	24293
	1993-94	23059	494	115	1512	698	25878
	1994-95	24742	621	229	1783	886	28261
	1995-96	28034	789	167	2386	878	32254
	1996-97	20276	6783	2284	3608	2068	35019
	1997-98	20662	6891	2390	3843	2285	36071
	1998-99	21367	6750	2576	4254	2270	37217
	1999-00	22386	7593	2622	3890	2796	39287
	2000-01	22197	7479	2596	3150	2516	37938
	2001-02(p)	21530	7039	2503	2751	2407	36230
Light Diesel Oil	1984-85	95	29	233	377	464	1198
	1985-86	86	30	255	397	355	1123
	1986-87	86	30	273	433	334	1156
	1987-88	101	32	251	520	341	1245
	1988-89	96	33	346	604	358	1437
	1989-90	98	35	325	577	443	1478
	1990-91	86	41	282	638	454	1501
	1991-92	80	37	230	644	465	1456
	1992-93	85	35	211	647	424	1402
	1993-94	82	36	182	625	437	1362
	1994-95	83	35	165	641	441	1365
	1995-96	68	41	166	700	332	1307
	1996-97	66	34	184	633	301	1218
	1997-98	64	34	189	621	322	1230
	1998-99	63	41	170	646	358	1278
	1999-00	59	47	176	769	461	1512
	2000-01	58	46	215	681	399	1399
	2001-02(p)	90	49	165	713	166	1183

(p)-Provisional

Cont'd...

XVII. 8. SECTOR-WISE (END USE) CONSUMPTION OF SELECTED PETROLEUM PRODUCTS IN INDIA (Concld.)

(000' tonnes)

Petroleum product	Year	Transport	Plantation	Power generation	Industry	Misce-llaneous services	Total
1	2	3	4	5	6	7	8
Furnace Oil	1984-85	357	125	1032	2444	298	4256
	1985-86	290	132	804	2337	243	3806
	1986-87	358	125	712	2429	169	3793
	1987-88	416	130	636	2765	244	4191
	1988-89	460	152	617	3205	170	4604
	1989-90	461	147	692	2977	199	4476
	1990-91	447	136	531	3150	198	4462
	1991-92	343	164	527	3692	211	4937
	1992-93	339	190	555	3962	227	5273
	1993-94	405	186	490	3603	342	5026
	1994-95	440	188	580	3944	685	5837
	1995-96	321	214	720	4836	405	6496
	1996-97	351	250	764	4691	478	6534
	1997-98	315	274	549	4865	648	6651
	1998-99	349	319	571	4824	704	6767
	1999-00	351	286	515	4901	763	6816
	2000-01	318	276	481	4543	753	6371
	2001-02(p)	345	297	513	4914	837	6906
Low Sulphur Heavy Stock	1994-85	-	25	1462	2813	187	4487
	1985-86	4	34	1526	2365	165	4094
	1986-87	4	38	1489	2696	27	4254
	1987-88	2	36	1659	2242	14	3953
	1988-89	4	34	1571	2234	8	3851
	1989-90	8	42	1630	2629	19	4328
	1990-91	13	49	1835	2605	22	4524
	1991-92	22	29	1798	2335	81	4265
	1992-93	10	35	1779	2122	48	3994
	1993-94	12	40	1676	2366	72	4166
	1994-95	2	27	1624	2258	141	4052
	1995-96	3	32	1747	2246	161	4189
	1996-97	3	25	1634	2480	171	4313
	1997-98	3	21	1614	2482	203	4323
	1998-99	5	43	1297	2980	212	4537
	1999-00	7	27	1363	3036	330	4763
	2000-01	1	22	1657	2948	361	4989
	2001-02(p)	4	21	1139	2727	372	4263

(p)-Provisional

XVII. 9 : GROSS AND NET PRODUCTION & UTILISATION OF NATURAL GAS IN INDIA.

(Million Cubic Metres)

Year	Gross production	Reinjected	Flared	Net production	Utilisation
1	2	3	4	5	6
1970-71	1445	36	762	647	647
1971-72	1535	49	768	718	718
1972-73	1565	141	653	771	771
1973-74	1713	115	836	762	762
1974-75	2041	139	951	951	951
1975-76	2368	162	1082	1124	1124
1976-77	2428	190	857	1381	1381
1977-78	2839	184	1191	1464	1464
1978-79	2812	148	953	1711	1711
1979-80	2767	127	964	1676	1676
1980-81	2358	67	769	1522	1522
1981-82	3851	110	1519	2222	2222
1982-83	4936	91	1888	2957	2957
1983-84	5961	45	2517	3399	3399
1984-85	7241	48	3052	4141	4141
1985-86	8134	66	3118	4950	4950
1986-87	9853	63	2718	7072	7072
1987-88	11467	54	3445	7968	7968
1988-89	13217	84	3883	9250	9250
1989-90	16988	96	5720	11172	11172
1990-91	17998	102	5130	12766	12766
1991-92	18645	132	4072	14441	14441
1992-93	18060	90	1854	16116	16116
1993-94	18335	71	1924	16340	16340
1994-95	19381	23	2020	17338	17338
1995-96	22639	0	1437	21202	21202
1996-97	23255	-	1760	21495	21495
1997-98	26401	-	1879	24522	24522
1998-99	27428	-	1712	25716	25716
1999-00	28446	-	1560	26886	26886
2000-01	29477	-	1617	27860	27860
2001-02(p)	29714	-	1677	28037	28037

(p) Provisional

XVII.10. INDUSTRY-WISE OFF-TAKE OF NATURAL GAS IN INDIA.

(Million Cubic Metres)

Year	Energy purposes				Non-energy purposes		Total
	Power generation	Industrial fuel	Tea plantation	Others*	Fertilizer industry	Others@	
1	2	3	4	5	6	7	8
1970-71	261	116	15	68	187	-	647
1971-72	313	129	19	61	196	-	718
1972-73	339	148	20	63	201	-	771
1973-74	323	157	22	81	179	-	762
1974-75	354	164	29	86	318	-	951
1975-76	366	143	33	117	463	2	1124
1976-77	344	155	38	157	663	24	1381
1977-78	372	165	39	184	673	31	1464
1978-79	560	175	43	189	721	23	1711
1979-80	514	156	39	187	755	25	1676
1980-81	492	163	45	190	611	21	1522
1981-82	612	166	47	379	991	27	2222
1982-83	1025	185	51	513	1155	28	2957
1983-84	1209	230	56	588	1283	33	3399
1984-85	1454	250	62	739	1603	33	4141
1985-86	1299	223	78	816	2500	34	4950
1986-87	2041	257	93	1320	3335	26	7072
1987-88	2721	281	99	1347	3490	30	7968
1988-89	1823	526	87	1371	5334	109	9250
1989-90	2140	695	78	1567	6578	114	11172
1990-91	3634	827	89	1825	5612	779	12766
1991-92	4774	766	108	2237	5509	1047	14441
1992-93	4967	1450	105	2103	6672	819	16116
1993-94	4785	1794	121	2466	6499	675	16340
1994-95	5229	1927	134	2420	6936	693	17339
1995-96$	6836	2301	111	767	7602	474	18091
1996-97$	6935	2631	130	802	7625	509	18632
1997-98$	8114	3106	117	775	8752	649	21513
1998-99$	8714	3005	147	1104	8869	650	22489
1999-00	8829	2329	140	5126	8592	1869	26885
2000-01	8801	2870	151	5377	8480	2181	27860
2001-02(p)	9214	2979	147	5894	7957	1846	28037

(p) Provisional
*Includes domestic fuel, captive use & LPG shrinkage.
@ Includes petro-chemicals.
$Excludes off-takes of Natural Gas by ONGC.

APPENDIX

ABBREVIATIONS

(i) COMPANIES/ORGANISATIONS

AOC	:	Assam Oil Company
AOD	:	Assam Oil Division
BPCL	:	Bharat Petroleum Corporation Limited
BRPL	:	Bongaigaon Refinery & Petrochemicals Limited
B/Shell	:	Burmah Shell Oil Storage & Distributing Co. Ltd.
BSR	:	Burmah Shell Refineries Ltd.
Caltex/CIL	:	Caltex (India) Limited.
CORIL	:	Caltex Oil Refining (India) Limited.
KRL	:	Kochi Refineries Limited.
EIL	:	Engineers India Limited.
ESSO	:	Esso Standard Eastern Inc.
ESRC	:	ESSO Standard Refining Company of India Limited.
GAIL	:	Gas Authority of India Ltd.
HPCL	:	Hindustan Petroleum Corporation Limited.
HIL	:	Hydrocarbons India Limited.
IBP Co. Ltd.	:	IBP Co. Limited.
CASTROL	:	Castrol Lubricants & Specialities Limited.
IIP	:	Indian Institute of Petroleum.
IPE	:	Institute of Petroleum Exploration.
IOBL	:	Indian Oil Blending Limited.
IOC	:	Indian Oil Corporation Limited.
Lubrizol	:	Lubrizol India Limited.
CPCL	:	Chennai Petroleum Corporation Limited.
POCL	:	Petrosil Oil Company Limited.
OIL	:	Oil India Limited.
ONGC	:	Oil & Natural Gas Commission/Corporation Ltd.
ONGCVL	:	ONGC Videsh Limited.
OPEC	:	Organisation of Petroleum Exporting Countries.
TWOC	:	Tide Water Oil Company.
WIODC	:	Western India Oil Distributing Company Limited.
OECD	:	Organisation for Economic Co-operation & Development.
NCW	:	Non Communist World.
EME	:	Emerging Market Economies.

(ii) PETROLEUM PRODUCTS

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

LIGHT DISTILLATES: (including Gases): Gasolines, Naphtha, SBP Spirit, Solvent Oils, Hexane, Benzene, Toluene, LPG, Refinery Gas and W.D. Mixtures.

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

(iii) PREFIXES USED IN METRIC TABLES

Prefix	:	Meaning
Milli	:	One Thousandth (1/1000=0.001)
Centi	:	One Hundredth (1/100=0.01)
Deci	:	One Tenth (1/10=0.1)
Unit	:	One (1)
Deka	:	Ten (10)
Hecto	:	One Hundred (100)
Kilo	:	One Thousand (1,000)
Mega	:	One Million (1,000,000)

(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
LR 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
100sq. Milimetres	—	1 Sq. Centimetre
100 Sq. Centimetres	—	1 Sq. Metre
100 Sq. Decimetres	—	1 Decimetre
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 Mililitres	—	1 Centilitre
10 Centilitres	—	1 Decilitre.
10 Decilitres	—	1 Litre
10 Litres	—	1 Decalitre
10 Decilitres	—	1 Hectolitre
10 Hectolitres	—	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
	—	1.09731 Yards
	—	0.001 Kilometre (km.)
1 Kilometre	—	1000 Metre (m)
	—	0.621371 Mile
1 Mile	—	1760 Yard
	—	1,60934 Kilometre (km.)
1 International 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.
1 Square Metre	—	0.836127 Square Metre (m2).
	—	10,7639 Square Feet.
	—	1.19599 Square Yards.
1 Acre	—	4840 Square Yards
	—	4046.86 Sq. Metres (m2)
	—	0.404686 Hectares.
1 Hectare	—	10,000 Square Metre (m 2).
	—	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 AND 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 Kilowatt Hour	—	3412.14 British Thermal Units
	—	859.845 Kilocalories
	—	3.6 Megajoules (MJ).
	—	1.34102 Horse Power Hours.
1 Therm	—	100.000 British Thermal Units (BTU).
	—	105.506 Megajoules (MJ).
	—	29.3071 Kilowatt Hours
	—	25,1996 Thermis
	—	25200 Kilocalories
1 Metric Horsepower	—	735.499 watts (W).
(Pferdestaeorke or Chewal 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 Imperial Horsepower.
	—	1000 Watts.
1 BTU	—	0.252 Kilocalories
	—	1.055 Kilojoules

CUBIC MEASURES
VOLUME

1 Cubic Inch	—	16.3871 Cubic Centimetres (cm3)
1 Pint	—	0.568261 Cubic Decimetres (dm3) or Litres.
1 Litre	—	61.024 Cubic Inches
	—	1.75975 Pints
	—	1 Cubic Decimetre (dm3)
	—	0.0353147 Cubic Foot
	—	0.264172 American Gallons.
	—	0.219963 Imperial Gallons.
1 Hectolitre	—	100 Cubic Decimetres (dm 3) or 100 Litres
1 American Gallon	—	231 Cubic Inches.
	—	3.78541 Cubic Decimetres or Litres.
	—	0.133681 Cubic Foot.
	—	0.832674 Imperial Gallon.
	—	0.0238095 American Barrel.
	—	0.00378541 Cubic Metre (M3).
1 Imperial Gallon	—	277.420 Cubic inches.
	—	4.54609 Cubic Decimetres (dm3) or Litres.
	—	1.20095 American Gallon.
	—	0.160544 Cubic Foot,
	—	0.02894 American Barrel.
	—	0.00454609 Cubic Metre (m3).
1 Cubic Foot	—	28,3168 Cubic Decimetres (dm3) or litres.
	—	7.48052 American Gallons.
	—	6.22883 Imperial Barrel.
	—	0.17811 American Barrel.
	—	0.0283168 Cubic Metre (m3)
1 American Barrel	—	9702 Cubic Inches.
	—	158.987 Cubic Decimetres (dm3) or Litres.
	—	42 American Gallons.
	—	34.9726 Imperial Gallons.
	—	5.6146 Cubic Feet.
	—	0.158987 Cubic Metre (m3).
1 Cubic Metre	—	1000 Litres.
	—	264.172 American Gallons
	—	219.969 imperial Gallons.
	—	35.3147 Cubic Feet.
1 Kilolitre	—	1000 Cubic Decimetres (dm3) or 1000 Litres.
	—	6.28981 American Barrels.
1 Gross Ton (Shipping)	—	2.83168 Cubic Metres or 100 Cubic Feet or Permanently Enclosed Space.
1 Ton of Liquified	—	Approx. 16 Barrels.
Methane	—	Approx. 1400 Cubic Metres of Natural

Gas Depending upon 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	1449	0.6901	9.11
Aviation Spirit 73 ON	1432	0.6983	9.01
Motor Spirit 79 ON/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 Fuel	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/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	9.08
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 Speed Diesel	1172	0.8532	7.37
Malaria 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
Deminerralised 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	0.6190	7.68

Volume per Metric Ton of Petroleum Products

Products	Kilolitre	Imperial Gallon	U.S. Gallon	Barrel
Liquified Petroleum 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	1.111	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.	High Speed Diesel Oil	0.9879
8.	Kerosene	0.9964
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

Degree 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 Gracity	Barrels Per tonnes
Crude Oils	0.80-0.90	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 Oil	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
Asphal Bitumens	1.00-1.10	6.4-5.8

CRUDE OIL CONVERSIONS @

To convert these into	Metric Tons	Barrels	Kilo liters	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 MULTIPLY 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 oils	1.035
Residuel Fuel Oils	0.985
Others	0.960

AVERAGE INTERNATIONAL CALORIFIC VALUE OF DIFFERENT FUELS

1	K.Cals./Kg M Cals.Tonne 2	BTUS/Kg. 3
A. Oil Equivalence		
Average Crude Oil/NGLS(a)	10,300	40870
United Nations	10,175	40375
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
E. Natural Gas-Production:(Average) India		
K cals/Cu. Metre	89,00-9480	
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 crude oil relevant converson factor may have to be used.

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

(c) Calorific value of 1kwh of electricity.

(d) Represents K cals of hydro-carbon energies required to produce 1 knh 01 electricity 1 as per Report of Fuel Policy Committee 1974

Conversion Factor: 1 K cal=14.19 Joules.

COEFFICIENTS USED TO CONVERT FROM ORIGINAL UNITS INTO STANDARD 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.	**OTHERS HYDROCARBONS**			
1.	Petroleum Crude	1.454		
2.	Natural Gas Liquids (wt.av.)	1.542		
3.	Gasolines	1.500		
4.	Kerosene & Jet Fuel	1.474		
5.	Gas-Diesel Oil	1450		
6.	Residuel Fuel Oil	1416		
7.	Liquified Petroleum Gases	1554		
8.	Natural Gasoline	1532		
9.	Condensate	1512		
10.	Other Natural Gas Liquids	1512		
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 in measured in Kcal/m3 (st.) i.e., in Kcal percubic metre of ga understandard condition of 15 C, 013.25 mbar, dry.

COAL REPLACEMENT AND EQUIVALENTS OF DIFFERENT FUELS

Fuels Unit	Original of coal	Unit of coal Equivalent (mtce)	Unit of coal Replacement (mtcr)
1	2	3	4
Coal cooking 6640 K cal/Kg., Non-cooking coal Used in steam Generaton (5000 Kcal/kg.)	1mt	1.0	1.0
Hard Coke	1mt	1.3	1.3
Soft Coke	1mt	1.5	1.3
Firewood (4750 Kcal/Kg)	1mt	0.95	0.95
Char Coal (6900 Kcal/Kg)	1mt	1.0	1.0
2. Oil Products:			
Black Products (i.e. Fuel Oil., F.O. Refinery Fuel, LSHS, HHS).	1mt	2.0	2.0
Kerosene & LPG	1mt	2.0	2.0
HSDO & LDO	1mt	2.0	9.0
Motor Spirit & Jet Fuel	1mt	2.0	7.5
Natural Gas (9000K cal/Kg.)	109*m3	1.8	3.6
Electricity	109 kwh	1.0	1.0

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

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.	=	(1 Cub metre = 9000 K cal).
	1000 BTU)	=	1.111 thousand million cubic metres
		=	39.2 thousand million cubic feet
		=	107 million cubic feet per day of a year
4.	Electricity		
	(1 Kwh=3412 BTU)	=	12 thousand million KWH

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

	Items	Million Tonnes of Oil equals
1.	**Heat Units**	
	10 million million BTU	0.25
	100 million therms	0.25
	10.000 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 thousand million KWH	0.86

One million tonnes of oil produces about 4000 million units (KWH) of electricity in a modern power station.
Surce: BP Statistical Review of World Energy.

Exchange Rate
1971-2001 and 1971-72 to 2001-02

0.670.67 (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
1975	7.821	8.053	8.716	8.913	8.376	1975-76	8.65325
1980	7.993	7.921	7.747	7.791	7.863	1980-81	7.89278
1985	12.838	12.498	12.048	12.091	12.369	1985-86	12.23725
1990	17.029	17.344	17.554	18.087	17.504	1990-91	17.94850
1991	18.309	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	31.40
1995	31.401	31.411	32.045	34.745	32.401	1995-96	33.45
1996	34.649	34.743	35.643	35.740	35.193	1996-97	35.50
1997	35.811	35.813	36.029	37.560	36.321	1997-98	37.16
1998	39.257	40.790	42.596	42.358	41.250	1998-99	42.07
1999	42.50	42.877	43.426	43.544	43.084	1999-00	43.33
2000	43.58	44.10	45.78	46.62	45.02	2000-01	45.68
2001	48.73	48.96	48.60	48.26	48.64	2001-02	47.69

Notes: (1) A new valueof 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. Dollarfrom December 18, 1946 to September 21, 1949.

(2) Exchange rate for the year 1970 and 1971 are based on Trade conversion Factors.

(3) Exchanges rate for the year 1972 onwards are based on par rates/market rates.

Source: International Financial Statistics, Economic Survey.

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