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SUBJECT: DE-FG01-91IE11052
Pacific Islands' Energy Security Project

Dear Sir:

With regard to the above referenced grant, please find attached the report titled "Asia-Pacific Energy Database", which we are submitting as part of deliverable activity 3 of the project.

Sincerely yours,

Fereidun Fesharaki

enc.

MASTER

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ASIA-PACIFIC ENERGY DATABASE

By

East-West Center
Program on Resources
1601 East-West Road
Honolulu, HI 96848

DE-FG01-91IE11052
Pacific Islands' Energy Security Project

June 1997

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Primary Commercial Energy Consumption by Source, 1995-96

World

Asia-Pacific Region

**Primary Commercial Energy Production and Consumption
in the Asia-Pacific Region (Excluding China and India), 1995-96**

Primary Commercial Energy Production

Primary Commercial Energy Consumption

Current and Future Primary Energy Consumption Structure in the Asia-Pacific Region, 1995-96 and 2005

I. Assuming oil price at \$15 per barrel in 2005; II. Assuming oil price at \$25 per barrel in 2005.

II. Historical Petroleum Product Demand and Forecasts

**Annual Growth Rates of Asia-Pacific Petroleum
Product Demand, 1986-1996 (%)**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	AAGR (1986-96)
Including Japan	4.9	4.5	7.0	6.9	5.8	4.8	6.5	4.5	5.8	4.7	3.9	5.4
Excluding Japan	7.3	5.7	7.8	8.3	6.3	6.4	9.3	7.9	5.9	7.2	5.8	7.1
Japan	1.6	2.8	5.7	4.6	5.0	2.2	1.7	-1.6	5.7	-0.2	-0.2	2.5

Note: Petroleum product demand includes direct burning of crude oil and bunker fuel for all countries.

**Annual Growth Rates of Asia-Pacific Petroleum
Product Demand, 1986-1996**

Asia-Pacific Petroleum Product Demand, 1970-2010

Note: 1970-95 are actual demand.

Asia-Pacific Petroleum Product Demand (Excluding Fuel Oil), 1970-2010

Note: 1970-95 are actual demand.

Australia Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

Brunei Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-94 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates Total demand shown on top

China Petroleum Product Demand Forecast, 1990-2010

India Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

Indonesia Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates Total demand shown on top

Japan Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates Total demand shown on top

Malaysia Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates Total demand shown on top

New Zealand Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

Pakistan Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates *Total demand shown on top*

Philippines Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates Total demand shown on top

Singapore Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates ■ Light Distillates *Total demand shown on top*

South Korea Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates *Total demand shown on top*

Taiwan Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ▨ Middle Distillates ▤ Light Distillates *Total demand shown on top*

Thailand Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

Vietnam Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-95 is actual.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

Other Asia Petroleum Product Demand Forecast, 1990-2010

Note: Demand for 1990-96 is estimated.

■ Heavy Distillates ■ Middle Distillates □ Light Distillates Total demand shown on top

The Asia-Pacific Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	818.0	761.6	1,637.8	1,201.0	2,524.9	2,857.0	422.6	10,223.0	39.6	400.3	293.3
1986	872.8	799.0	1,743.6	1,233.1	2,678.6	2,935.7	462.5	10,725.4	41.7	425.0	347.6
1987	913.0	873.3	1,814.3	1,304.5	2,933.4	2,891.2	480.7	11,210.4	62.1	403.5	344.8
1988	902.9	916.2	1,927.2	1,377.7	3,168.3	3,193.4	507.2	11,992.9	61.3	499.6	381.8
1989	987.1	972.1	2,085.0	1,428.7	3,449.8	3,365.7	528.8	12,817.2	54.5	526.3	413.7
1990	1,034.0	1,010.2	2,219.7	1,508.9	3,665.5	3,588.7	530.1	13,557.1	62.4	562.8	454.1
1991	1,112.7	1,117.1	2,296.6	1,535.4	3,907.4	3,687.0	550.9	14,207.2	68.5	560.6	498.5
1992	1,190.4	1,248.1	2,438.8	1,615.7	4,247.3	3,808.7	579.8	15,128.8	76.1	530.1	531.1
1993	1,274.3	1,291.8	2,648.7	1,725.1	4,549.7	3,724.1	596.9	15,810.6	87.6	438.9	575.4
1994	1,336.6	1,483.9	2,761.8	1,806.2	4,731.5	3,978.8	629.4	16,728.1	95.5	546.0	637.7
1995	1,412.0	1,617.9	2,906.1	1,941.9	5,116.1	3,887.9	638.9	17,520.8	88.2	457.2	594.5
1996	1,488.5	1,622.1	3,046.9	2,004.1	5,436.5	3,947.1	653.7	18,198.9	96.1	434.2	612.4
1997	1,553.5	1,708.5	3,184.7	2,099.7	5,731.5	4,028.7	674.3	18,980.8	96.6	416.9	631.2
1998	1,641.8	1,769.4	3,340.0	2,195.1	6,034.6	4,101.7	696.2	19,778.8	97.7	403.2	652.4
2000	1,811.3	1,899.3	3,674.1	2,393.9	6,646.5	4,208.1	731.7	21,365.0	103.1	389.9	700.8
2005	2,205.1	2,275.6	4,558.4	2,869.9	8,180.1	4,423.4	828.2	25,340.7	115.0	356.7	760.5
2010	2,704.9	2,496.8	5,391.0	3,396.1	9,713.5	4,750.6	933.6	29,386.5	124.2	319.9	828.1
Average Annual Growth Rate (AAGR)											
1985-1995	6.6%	10.1%	5.6%	4.6%	6.6%	2.6%	4.4%	5.4%	11.2%	(0.8%)	8.9%
1995-2000	5.1%	3.3%	4.8%	4.3%	5.4%	1.6%	2.7%	4.0%	3.2%	(3.1%)	3.3%
2000-2005	4.0%	3.7%	4.4%	3.7%	4.2%	1.0%	2.5%	3.5%	2.2%	(1.8%)	1.6%
2005-2010	4.2%	1.9%	3.4%	3.4%	3.5%	1.4%	2.4%	3.0%	1.6%	(2.2%)	1.7%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1994: actual; 1995: actual for most countries; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "-"=zero value.

Australia Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	TOTAL	BK GO	DB Crude	BK FO
1985	29.8	13.5	271.5	45.1	146.0	57.1	22.2	585.2	2.0	-	11.1
1986	34.4	13.4	276.5	46.0	148.0	46.4	24.4	589.2	1.8	0.0	7.1
1987	35.8	11.2	276.3	48.1	154.3	42.0	23.5	591.3	2.1	0.0	7.4
1988	40.6	13.0	286.0	51.7	160.7	41.0	23.1	616.1	2.7	0.0	8.0
1989	43.0	13.8	294.9	54.6	172.1	42.7	22.2	643.3	2.7	0.0	9.5
1990	48.9	14.5	304.6	52.4	176.9	43.5	20.4	661.1	2.5	0.0	9.9
1991	52.8	14.6	292.6	61.2	170.8	42.8	18.9	653.7	2.2	0.0	9.2
1992	58.1	13.3	295.9	64.9	177.5	40.0	18.7	668.4	2.0	0.0	9.8
1993	62.7	14.6	299.4	67.5	183.6	35.6	23.0	686.4	2.2	0.0	10.6
1994	67.5	14.6	306.6	72.2	191.2	46.3	25.3	723.6	4.0	0.0	11.5
1995	70.9	15.1	307.7	80.3	198.0	44.8	26.5	743.3	4.1	0.0	9.0
1996	72.9	15.1	311.4	85.1	205.3	43.2	26.5	759.5	4.7	0.0	8.1
1997	73.3	15.1	316.5	90.0	208.0	41.8	26.9	771.6	4.7	0.0	7.3
1998	76.2	15.4	320.7	95.2	213.0	41.2	27.2	788.8	4.8	0.0	7.3
2000	81.4	16.7	329.3	108.2	226.0	41.8	27.6	831.0	4.9	0.0	9.1
2005	91.9	17.4	346.1	127.4	256.4	41.1	31.0	911.2	5.0	0.0	10.2
2010	97.5	17.8	355.0	138.2	263.2	40.2	35.0	946.9	5.2	0.0	10.4
Average Annual Growth Rate (AAGR)											
1985-1995	9.1%	1.1%	1.3%	5.9%	3.1%	(2.4%)	1.8%	2.4%	7.5%	n.a.	(2.1%)
1995-2000	2.8%	2.0%	1.4%	6.1%	2.7%	(1.4%)	0.8%	2.3%	3.6%	-	0.2%
2000-2005	2.5%	0.8%	1.0%	3.3%	2.6%	(0.4%)	2.3%	1.9%	0.4%	-	2.3%
2005-2010	1.2%	0.4%	0.5%	1.6%	0.5%	(0.4%)	2.5%	0.8%	0.8%	-	0.4%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Brunei Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	1.2	0.0	3.6	0.3	2.0	0.0	0.1	7.3	-	-	-
1986	1.3	0.0	3.5	0.5	2.1	0.0	0.1	7.5	-	-	-
1987	1.3	0.0	3.5	0.4	2.3	0.0	0.1	7.7	-	-	-
1988	1.3	0.0	3.6	0.7	1.9	0.0	0.1	7.6	-	-	-
1989	1.3	0.0	4.0	1.0	2.0	0.0	0.1	8.5	-	-	-
1990	1.5	-	3.7	1.0	2.2	-	0.2	8.6	-	-	-
1991	1.6	-	3.8	0.9	2.3	-	0.2	8.8	-	-	-
1992	1.8	-	3.8	1.0	2.6	-	0.3	9.6	-	-	-
1993	2.0	-	3.8	0.6	2.7	-	0.3	9.4	-	-	-
1994	2.1	-	3.9	0.6	2.5	-	0.3	9.4	-	-	-
1995	2.3	-	3.9	0.5	2.6	0.0	0.3	9.7	-	-	-
1996	2.5	-	3.9	0.6	2.9	0.0	0.3	10.2	-	-	-
1997	2.3	0.0	4.2	0.6	2.9	0.0	0.3	10.4	-	-	-
1998	2.5	-	4.4	0.7	2.1	0.0	0.3	10.0	-	-	-
2000	3.0	-	4.6	0.7	0.5	0.0	0.3	9.1	-	-	-
2005	3.9	-	5.3	0.8	0.5	0.0	0.3	10.8	-	-	-
2010	4.3	0.0	6.3	0.8	0.5	0.0	0.4	12.3	-	-	-
Average Annual Growth Rate (AAGR)											
1985-1995	6.9%	n.a.	0.8%	4.6%	2.6%	-	12.1%	2.9%	n.a.	n.a.	n.a.
1995-2000	5.5%	n.a.	3.4%	6.2%	(28.1%)	-	-	(1.1%)	n.a.	n.a.	n.a.
2000-2005	5.4%	n.a.	2.9%	2.6%	-	-	-	3.5%	n.a.	n.a.	n.a.
2005-2010	1.8%	n.a.	3.6%	0.0%	(0.4%)	-	3.5%	2.6%	n.a.	n.a.	n.a.

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1994: actual; 1995-96: estimates; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

China Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	50.8	48.9	304.7	82.0	456.5	656.2	99.4	1,698.6	-	138.2	34.0
1986	64.2	44.0	360.6	82.0	516.4	692.7	110.4	1,870.3	-	143.7	38.0
1987	60.4	70.4	374.6	81.3	596.8	705.9	116.1	2,005.6	-	136.9	41.6
1988	70.1	78.5	411.6	76.3	626.6	731.0	121.3	2,115.4	-	140.0	43.7
1989	75.1	89.1	456.4	76.5	692.2	743.5	125.5	2,258.3	-	139.3	47.8
1990	80.7	92.7	466.3	73.7	662.0	728.0	122.5	2,225.8	-	109.6	53.3
1991	97.1	105.5	513.8	80.6	737.4	724.7	128.2	2,387.4	-	92.2	54.5
1992	107.8	103.5	573.1	85.2	834.5	738.4	145.6	2,588.1	-	85.3	49.7
1993	140.7	114.4	685.0	90.8	940.0	750.0	153.5	2,874.4	-	90.0	52.8
1994	172.4	140.0	685.0	97.4	965.0	777.0	166.3	3,003.1	-	110.0	54.0
1995	210.5	153.0	705.0	102.6	1,034.6	783.9	175.1	3,164.7	-	105.0	56.0
1996	230.0	163.0	750.0	112.0	1,105.0	791.0	182.0	3,333.0	-	99.0	56.4
1997	250.0	177.8	785.0	120.2	1,185.0	804.8	190.0	3,512.8	-	98.0	56.8
1998	271.8	189.1	834.1	129.0	1,263.4	815.7	198.0	3,701.0	-	96.0	57.2
2000	320.0	208.0	955.0	146.0	1,425.0	836.0	215.0	4,105.0	-	93.0	58.0
2005	450.0	358.0	1,324.7	183.0	1,875.0	912.0	250.0	5,352.7	-	90.0	67.0
2010	622.5	410.0	1,600.0	224.7	2,400.0	970.4	286.4	6,514.0	-	85.0	70.4
Average Annual Growth Rate (AAGR)											
1985-1995	15.3%	12.1%	8.7%	2.3%	8.5%	1.8%	5.8%	6.4%	n.a.	(2.7%)	5.1%
1995-2000	8.7%	6.3%	6.3%	7.3%	6.6%	1.3%	4.2%	5.3%	n.a.	(2.4%)	0.7%
2000-2005	7.1%	11.5%	6.8%	4.6%	5.6%	1.8%	3.1%	5.5%	n.a.	(0.7%)	2.9%
2005-2010	6.7%	2.7%	3.8%	4.2%	5.1%	1.2%	2.8%	4.0%	n.a.	(1.1%)	1.0%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

India Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	TOTAL	BK GO	DB Crude	BK FO
1985	37.3	72.4	53.0	161.7	325.0	146.4	47.4	843.1	0.9	-	1.2
1986	45.5	74.4	57.2	172.4	345.2	147.8	50.9	893.4	0.7	-	1.6
1987	51.8	67.0	64.4	185.2	376.9	151.9	54.6	951.6	1.1	-	3.2
1988	60.0	75.9	70.0	197.4	404.1	156.4	60.2	1,023.9	1.4	-	3.9
1989	75.0	79.7	79.2	209.9	447.3	161.8	67.4	1,120.4	1.3	-	3.1
1990	74.8	79.1	84.2	215.8	466.4	174.1	70.0	1,164.4	1.3	-	3.1
1991	81.5	79.6	84.3	217.3	480.7	171.5	67.1	1,182.0	1.1	-	3.2
1992	90.3	78.7	84.4	223.5	530.7	179.3	68.1	1,255.0	1.1	-	3.1
1993	96.5	79.5	92.1	228.0	547.5	172.1	57.5	1,273.2	1.2	-	3.1
1994	102.2	95.5	96.9	259.5	577.1	172.0	67.9	1,371.2	1.1	-	3.1
1995	117.0	93.0	113.0	249.0	694.1	190.0	66.2	1,522.3	1.1	-	3.1
1996	126.0	99.0	121.0	266.0	791.2	194.1	67.0	1,664.3	1.2	-	3.1
1997	136.0	106.0	129.0	285.0	858.4	199.0	70.0	1,783.4	1.2	-	3.1
1998	147.0	114.0	138.0	304.0	926.9	204.0	75.0	1,908.9	1.2	-	3.1
2000	171.0	130.0	158.0	346.0	1,056.2	214.0	79.8	2,155.0	1.3	-	3.1
2005	250.0	181.0	221.0	479.0	1,408.4	240.0	103.7	2,883.1	1.4	-	3.1
2010	365.0	253.0	309.0	664.0	1,688.5	270.0	124.4	3,673.9	1.5	-	3.1
Average Annual Growth Rate (AAGR)											
1985-1995	12.1%	2.5%	7.9%	4.4%	7.9%	2.6%	3.4%	6.1%	2.5%	n.a.	9.8%
1995-2000	7.9%	6.9%	6.9%	6.8%	8.8%	2.4%	3.8%	7.2%	3.4%	n.a.	-
2000-2005	7.9%	6.8%	6.9%	6.7%	5.9%	2.3%	5.4%	6.0%	1.5%	n.a.	-
2005-2010	7.9%	6.9%	6.9%	6.7%	3.7%	2.4%	3.7%	5.0%	1.4%	n.a.	-

*Includes bunker gasoil (BK GO). **Includes bunker fuel oil (BK FO) and direct burning of crude oil (DB Crude).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Indonesia Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	4.6	7.8	70.8	131.0	167.2	65.2	12.6	459.1	0.3	3.3	3.8
1986	5.6	7.9	77.0	129.9	160.3	54.5	17.2	452.5	1.2	3.2	1.8
1987	6.9	8.2	83.6	132.7	171.2	59.5	20.3	482.3	0.3	3.2	2.9
1988	7.5	8.2	84.9	138.3	191.4	53.8	22.5	506.5	1.2	1.0	3.2
1989	8.9	15.5	98.0	144.3	204.2	54.6	21.0	546.5	0.7	-	4.0
1990	6.8	9.6	109.6	154.9	228.8	79.6	21.6	610.9	-	-	6.6
1991	7.7	15.6	118.3	159.2	259.5	91.7	20.0	672.0	3.7	-	4.7
1992	8.9	22.7	124.4	169.1	292.5	97.0	25.0	739.6	4.2	-	5.4
1993	10.0	5.0	131.0	178.0	324.0	100.4	25.0	773.4	4.0	-	5.4
1994	16.2	15.0	143.7	181.1	310.2	74.1	27.0	767.3	4.0	-	5.4
1995	18.2	20.0	160.2	191.6	330.2	74.5	29.0	823.7	4.0	-	5.4
1996	20.9	22.0	171.4	199.2	349.8	76.7	30.0	870.0	4.0	-	5.5
1997	23.4	25.0	182.5	207.2	372.3	79.6	31.0	921.1	4.0	-	6.0
1998	26.2	30.0	193.5	215.5	398.1	82.8	33.0	979.0	4.0	-	6.2
2000	31.7	35.0	217.4	233.1	455.2	89.8	35.0	1,097.2	4.0	-	7.0
2005	50.1	45.0	284.1	287.4	604.9	103.5	40.0	1,415.1	4.0	-	8.0
2010	74.0	60.0	357.5	348.0	752.8	114.5	50.0	1,756.7	4.0	-	8.0
Average Annual Growth Rate (AAGR)											
1985-1995	14.7%	9.9%	8.5%	3.9%	7.0%	1.3%	8.7%	6.0%	31.1%	n.a.	3.6%
1995-2000	11.8%	11.8%	6.3%	4.0%	6.6%	3.8%	3.8%	5.9%	-	n.a.	5.3%
2000-2005	9.6%	5.2%	5.5%	4.3%	5.9%	2.9%	2.7%	5.2%	-	n.a.	2.7%
2005-2010	8.1%	5.9%	4.7%	3.9%	4.5%	2.0%	4.6%	4.4%	-	n.a.	-

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

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Malaysia Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	6.7	0.1	46.5	14.5	64.2	50.7	7.7	190.3	1.4	-	0.5
1986	7.9	0.2	48.4	15.2	61.7	50.7	7.9	191.9	0.4	-	1.0
1987	9.7	0.2	51.1	14.7	64.8	49.6	7.9	198.0	0.2	-	1.5
1988	11.1	0.3	54.5	14.2	70.7	49.8	7.6	208.2	0.1	-	1.1
1989	11.6	0.3	56.8	13.9	81.2	51.8	10.5	225.9	0.3	-	1.0
1990	15.7	0.3	63.4	17.1	90.3	72.5	11.3	270.6	0.8	-	1.0
1991	17.8	0.3	69.9	18.0	98.9	63.9	12.4	281.3	1.1	-	1.1
1992	22.0	0.4	73.5	17.8	105.2	59.6	13.2	291.6	1.1	-	1.1
1993	31.2	-	80.1	20.8	108.2	71.1	13.4	324.8	1.1	-	1.1
1994	37.4	10.0	86.0	23.2	123.0	53.9	10.9	344.4	1.1	-	1.1
1995	39.0	14.2	97.0	27.0	125.0	60.0	11.0	373.2	1.1	-	1.1
1996	55.0	15.0	101.0	27.8	136.1	41.1	12.0	388.1	1.1	-	1.1
1997	60.0	15.6	102.0	29.5	143.2	36.1	15.1	401.5	1.1	-	1.1
1998	69.3	15.6	106.3	31.3	150.7	31.6	16.3	421.1	1.1	-	1.1
2000	80.0	15.6	119.0	36.7	161.1	31.1	16.0	459.5	1.1	-	1.1
2005	110.0	27.0	152.0	48.0	214.1	36.1	17.4	604.6	1.1	-	1.1
2010	143.0	27.0	175.0	63.4	256.1	41.1	19.3	724.9	1.1	-	1.1
Average Annual Growth Rate (AAGR)											
1985-1995	19.3%	70.1%	7.6%	6.4%	6.9%	1.7%	3.7%	7.0%	(2.1%)	n.a.	7.2%
1995-2000	15.5%	1.9%	4.2%	6.3%	5.2%	(12.3%)	7.8%	4.2%	-	n.a.	-
2000-2005	6.6%	11.6%	5.0%	5.5%	5.9%	3.0%	1.7%	5.5%	-	n.a.	-
2005-2010	5.4%	-	2.9%	5.7%	3.6%	2.6%	2.1%	3.7%	-	n.a.	-

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

New Zealand Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	2.7	-	40.1	7.3	21.4	5.9	5.5	82.9	2.6	-	1.9
1986	3.1	0.0	39.3	8.6	21.7	4.8	5.7	83.3	2.1	-	1.5
1987	3.2	-	42.3	10.9	20.2	5.3	9.4	91.1	1.5	-	1.5
1988	3.6	-	41.9	12.2	20.3	5.7	6.6	90.3	2.2	-	2.1
1989	3.1	-	43.5	14.4	21.3	5.4	7.0	94.8	1.9	-	2.0
1990	4.0	-	45.6	14.7	25.4	7.2	3.2	100.0	2.7	-	3.5
1991	4.0	-	44.7	13.5	26.5	6.2	6.4	101.3	2.9	-	2.6
1992	3.2	-	45.3	13.4	26.4	8.7	3.9	100.9	2.1	-	3.1
1993	3.9	-	47.4	15.0	26.2	6.4	1.5	100.4	2.1	-	3.4
1994	3.8	-	48.3	16.0	30.9	9.1	1.4	109.5	2.1	-	3.0
1995	3.1	-	49.7	17.8	33.5	7.4	2.4	113.9	2.1	-	3.0
1996	3.2	-	49.9	18.4	34.7	7.6	2.2	116.0	2.1	-	3.1
1997	3.8	-	50.0	18.0	35.0	7.8	1.6	116.2	2.1	-	3.2
1998	4.0	-	50.2	18.6	36.2	8.0	1.5	118.5	2.1	-	3.3
2000	3.9	-	50.6	20.9	39.8	8.5	1.7	125.4	2.1	-	3.5
2005	3.7	-	55.8	21.0	41.0	10.5	1.5	133.5	3.0	-	4.0
2010	3.7	-	57.8	21.2	41.5	11.7	1.6	137.5	3.0	-	4.2
Average Annual Growth Rate (AAGR)											
1985-1995	1.4%	n.a.	2.2%	9.3%	4.6%	2.3%	(7.9%)	3.2%	(2.3%)	n.a.	4.9%
1995-2000	4.7%	n.a.	0.4%	3.3%	3.5%	2.8%	(6.7%)	1.9%	-	n.a.	3.1%
2000-2005	(1.0%)	n.a.	2.0%	0.1%	0.6%	4.3%	(2.5%)	1.3%	7.6%	n.a.	2.7%
2005-2010	-	n.a.	0.7%	0.2%	0.2%	2.2%	1.3%	0.6%	-	n.a.	1.0%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Pakistan Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	2.2	-	18.3	26.1	56.9	35.9	6.3	145.7	-	-	0.4
1986	2.4	-	19.2	28.0	61.0	37.9	6.7	155.2	0.1	-	0.1
1987	3.2	-	20.4	28.7	71.5	38.8	6.5	169.1	-	-	0.1
1988	4.1	-	22.0	28.9	81.2	43.6	6.9	186.7	-	-	0.3
1989	4.2	-	23.1	31.1	87.7	44.8	6.8	197.7	0.1	-	0.3
1990	4.0	-	25.0	33.9	87.5	57.2	7.0	214.6	0.1	-	0.6
1991	4.2	-	24.9	31.3	88.1	60.0	7.1	215.6	0.1	-	0.3
1992	4.3	-	26.4	25.5	102.8	64.3	7.2	230.5	0.1	-	0.3
1993	4.4	-	31.1	28.0	112.2	80.5	7.3	263.5	0.1	-	0.2
1994	4.5	-	33.0	31.0	119.1	87.2	8.0	282.8	0.1	-	0.2
1995	5.2	-	36.3	31.7	135.2	96.1	9.5	314.0	0.1	-	0.2
1996	5.8	-	40.0	32.7	140.8	106.8	9.9	336.0	0.1	-	0.2
1997	6.4	-	44.1	33.6	146.7	118.6	10.4	359.8	0.1	-	0.2
1998	7.1	-	48.5	34.7	152.9	131.7	10.8	385.7	0.1	-	0.2
2000	8.8	-	58.9	36.8	165.9	162.6	11.8	444.8	0.1	-	0.3
2005	19.6	-	88.7	50.5	214.3	200.7	15.5	589.3	0.2	-	0.5
2010	29.9	-	125.6	61.9	242.7	286.6	20.6	767.3	0.2	-	0.9
Average Annual Growth Rate (AAGR)											
1985-1995	9.0%	n.a.	7.1%	2.0%	9.0%	10.3%	4.2%	8.0%	n.a.	n.a.	(5.8%)
1995-2000	11.1%	n.a.	10.2%	3.0%	4.2%	11.1%	4.4%	7.2%	-	n.a.	6.4%
2000-2005	17.4%	n.a.	8.5%	6.5%	5.3%	4.3%	5.6%	5.8%	14.9%	n.a.	10.8%
2005-2010	8.8%	n.a.	7.2%	4.2%	2.5%	7.4%	5.9%	5.4%	-	n.a.	12.5%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Philippines Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	6.0	2.5	23.2	13.0	43.1	71.5	1.9	161.3	0.4	-	0.6
1986	6.7	1.7	25.2	13.7	44.4	75.8	2.4	170.0	0.4	-	1.0
1987	8.2	1.6	28.0	16.4	50.9	69.7	2.9	177.6	0.4	-	1.5
1988	9.6	1.4	30.0	18.1	52.8	74.0	2.7	188.6	0.4	-	1.5
1989	11.4	2.0	33.4	21.7	60.6	81.4	3.3	213.9	0.4	-	1.4
1990	12.6	1.7	35.2	21.2	62.8	79.2	3.4	216.1	0.4	-	0.8
1991	13.0	2.3	30.3	20.5	70.7	76.0	3.6	216.4	0.3	-	0.4
1992	14.8	1.3	33.9	22.5	92.3	79.8	4.3	248.8	0.5	-	0.8
1993	17.5	1.0	40.0	26.7	108.1	86.0	5.5	284.8	0.5	-	1.0
1994	18.6	1.0	39.7	25.8	108.5	84.6	5.0	283.2	0.5	-	0.6
1995	21.3	1.0	48.6	25.4	106.2	112.2	5.4	320.2	0.5	-	0.8
1996	25.7	1.0	48.1	28.5	108.0	111.8	5.3	328.6	0.5	-	1.0
1997	29.8	1.0	52.4	30.5	114.1	125.8	5.2	359.0	0.5	-	1.5
1998	35.0	1.0	57.8	32.8	120.7	138.7	5.2	391.2	0.5	-	1.9
2000	43.6	1.0	67.2	37.7	134.5	152.0	5.0	441.1	0.5	-	2.4
2005	71.5	2.0	97.3	51.0	159.1	186.9	6.8	674.6	0.5	-	3.3
2010	107.8	2.0	133.3	68.9	210.1	276.9	6.9	806.9	0.5	-	4.0
Average Annual Growth Rate (AAGR)											
1985-1995	13.5%	(8.5%)	7.7%	6.9%	9.4%	4.6%	11.0%	7.1%	1.9%	n.a.	3.2%
1995-2000	15.4%	-	6.7%	8.2%	4.8%	6.3%	(1.5%)	6.6%	(0.0%)	n.a.	24.6%
2000-2005	10.4%	13.9%	7.7%	6.2%	3.4%	4.2%	6.3%	5.4%	-	n.a.	6.6%
2005-2010	8.6%	-	6.5%	6.2%	5.7%	8.2%	0.4%	7.0%	-	n.a.	3.9%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Singapore Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	13.7	17.0	8.6	24.0	26.9	123.4	6.1	219.8	12.2	-	78.4
1986	12.3	17.7	9.6	27.1	30.6	184.3	5.1	286.8	16.0	-	138.2
1987	12.4	25.1	10.2	29.3	41.8	177.0	5.7	301.4	27.0	-	128.2
1988	12.4	25.9	10.8	31.4	43.0	211.3	5.0	339.8	29.1	-	154.3
1989	16.0	27.2	11.0	32.5	41.2	227.1	5.4	360.3	24.0	-	167.9
1990	11.0	32.0	12.0	36.3	45.9	251.8	8.9	397.8	26.0	-	189.4
1991	10.5	29.9	11.4	38.5	41.5	293.8	9.5	435.0	24.0	-	224.8
1992	11.0	35.3	12.1	43.1	47.5	305.7	6.9	461.6	30.0	-	231.6
1993	12.3	35.7	12.5	48.5	60.0	301.2	7.5	477.7	42.0	-	243.0
1994	12.4	32.7	12.8	51.4	67.0	335.0	7.3	518.6	49.0	-	298.0
1995	10.6	28.8	13.9	58.7	82.3	327.5	7.8	529.6	40.1	-	266.3
1996	10.6	34.2	14.6	64.4	91.5	349.5	7.9	572.7	44.9	-	281.8
1997	11.0	49.0	15.0	70.7	93.4	363.1	8.0	610.2	45.3	-	293.3
1998	11.5	63.8	15.3	77.5	95.3	380.3	8.0	651.7	45.8	-	308.5
2000	13.0	66.0	16.0	93.5	98.8	415.2	8.2	710.7	46.7	-	343.0
2005	14.5	95.0	15.5	127.8	103.7	455.0	8.6	820.1	51.7	-	375.0
2010	15.5	115.0	17.0	145.4	108.1	496.0	9.2	906.2	55.1	-	420.0
Average Annual Growth Rate (AAGR)											
1985-1995	(2.6%)	5.4%	4.9%	9.3%	11.8%	10.3%	2.5%	9.2%	12.6%	n.a.	13.0%
1995-2000	4.2%	18.0%	2.9%	9.8%	3.7%	4.9%	1.0%	6.1%	3.1%	n.a.	5.2%
2000-2005	2.2%	7.6%	(0.6%)	6.5%	1.0%	1.8%	1.0%	2.9%	2.1%	n.a.	1.8%
2005-2010	1.3%	3.9%	1.9%	2.6%	0.8%	1.7%	1.4%	2.0%	1.3%	n.a.	2.3%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

South Korea Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	39.0	71.7	18.9	42.6	144.2	227.8	12.1	556.4	1.3	-	8.5
1986	48.2	81.3	23.5	48.6	158.1	225.4	12.5	597.6	1.6	-	15.8
1987	58.2	86.6	28.4	51.1	176.6	219.8	12.8	633.5	2.5	-	22.8
1988	71.0	92.5	35.4	57.6	197.7	273.0	14.9	742.1	3.6	-	26.1
1989	83.1	92.4	50.1	69.8	223.2	314.3	18.5	851.3	5.2	-	30.1
1990	97.8	129.0	64.6	103.3	271.7	325.2	16.6	1,008.2	4.8	-	25.6
1991	118.2	178.7	78.7	105.0	320.5	388.5	32.0	1,221.6	6.8	-	38.6
1992	147.3	266.2	96.3	124.8	358.0	448.1	40.0	1,480.7	9.0	-	49.9
1993	163.2	297.5	116.5	155.0	387.4	474.2	39.0	1,632.9	9.3	-	62.3
1994	173.8	337.1	140.0	175.0	413.0	506.6	40.0	1,785.5	9.5	-	68.6
1995	182.1	360.2	162.7	216.3	457.0	516.2	41.2	1,935.7	10.0	-	70.2
1996	174.2	360.4	183.2	224.8	484.1	529.9	41.5	1,998.1	10.2	-	70.4
1997	168.1	367.4	204.0	237.7	515.9	554.0	44.1	2,091.2	10.0	-	70.5
1998	170.9	373.4	224.0	250.0	550.4	579.3	45.2	2,193.2	10.2	-	70.7
2000	181.2	383.3	259.9	275.5	631.0	646.0	46.6	2,423.5	11.0	-	71.0
2005	207.0	401.5	315.0	338.7	738.0	699.5	48.9	2,748.6	12.0	-	64.5
2010	230.3	411.6	355.0	402.7	843.0	740.0	51.4	3,034.0	13.0	-	65.0
Average Annual Growth Rate (AAGR)											
1985-1995	16.7%	17.5%	24.0%	17.6%	12.2%	8.5%	13.1%	13.3%	22.9%	n.a.	23.6%
1995-2000	(0.1%)	1.3%	9.8%	5.0%	6.7%	4.6%	2.5%	4.6%	1.9%	n.a.	0.2%
2000-2005	2.7%	0.9%	3.9%	4.2%	3.2%	1.6%	1.0%	2.5%	1.8%	n.a.	(1.9%)
2005-2010	2.2%	0.5%	2.4%	3.5%	2.7%	1.1%	1.0%	2.0%	1.6%	n.a.	0.2%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Taiwan Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	30.1	98.4	50.5	16.6	55.4	116.8	19.0	386.9	1.0	-	9.1
1986	33.9	107.0	54.9	14.7	58.5	143.7	29.2	441.9	1.3	-	15.1
1987	36.1	106.4	61.4	18.7	62.9	143.0	27.8	456.3	1.4	-	16.7
1988	39.6	100.0	73.0	19.6	67.5	190.6	31.0	521.3	1.3	-	21.8
1989	40.9	103.0	84.8	20.4	76.0	222.4	29.0	576.5	2.4	-	30.3
1990	40.3	101.0	97.8	26.5	86.7	233.0	27.6	613.0	2.1	-	28.4
1991	42.0	98.0	95.8	27.5	93.4	240.4	28.3	625.4	4.9	-	25.8
1992	46.0	102.0	108.0	30.6	86.0	234.8	29.6	637.0	3.0	-	36.8
1993	46.5	105.0	115.0	33.8	91.0	250.0	30.3	671.6	3.0	-	39.0
1994	47.0	118.0	124.0	35.0	94.0	253.0	32.0	703.0	3.0	-	39.0
1995	46.0	135.0	137.0	40.0	118.0	246.0	31.1	753.1	4.0	-	39.0
1996	46.0	144.4	150.0	42.0	133.0	256.0	32.0	803.4	4.0	-	40.0
1997	47.0	156.0	161.0	44.0	140.0	271.0	33.0	852.0	4.0	-	40.9
1998	47.0	166.9	172.0	46.0	147.0	260.0	33.9	872.8	4.0	-	41.9
2000	48.0	189.0	196.0	50.0	154.0	239.0	36.0	912.0	4.0	-	44.0
2005	51.0	244.0	263.0	60.0	197.0	253.0	39.0	1,107.0	5.0	-	48.0
2010	53.0	250.2	348.0	73.0	251.0	266.0	40.6	1,281.8	6.0	-	50.6
Average Annual Growth Rate (AAGR)											
1985-1995	4.3%	3.2%	10.5%	9.2%	7.8%	7.7%	5.0%	6.9%	14.4%	n.a.	15.7%
1995-2000	0.9%	7.0%	7.4%	4.6%	5.5%	(0.6%)	3.0%	3.9%	-	n.a.	2.4%
2000-2005	1.2%	5.2%	6.1%	3.7%	5.0%	1.1%	1.6%	4.0%	4.6%	n.a.	1.8%
2005-2010	0.8%	0.5%	5.8%	4.0%	5.0%	1.0%	0.8%	3.0%	3.7%	n.a.	1.1%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "-"=zero value.

Thailand Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	19.2	-	35.7	23.9	95.8	40.3	6.6	221.4	0.7	-	3.1
1986	20.2	-	38.7	26.0	99.7	42.7	7.7	235.0	0.9	-	4.6
1987	20.5	-	45.1	28.1	109.8	41.5	6.8	251.9	1.3	-	5.6
1988	24.5	-	51.3	34.2	125.4	49.5	6.6	291.5	1.5	-	5.5
1989	26.5	-	57.6	38.1	148.1	65.1	6.9	342.3	1.8	-	7.6
1990	31.0	-	64.0	43.2	170.9	97.3	9.9	416.3	1.9	0.2	8.3
1991	37.0	3.9	63.1	45.6	172.8	114.1	10.3	446.8	1.8	0.4	9.3
1992	37.4	-	74.4	47.7	203.1	134.0	12.2	508.8	2.5	0.8	10.4
1993	43.0	1.3	82.7	53.0	238.0	145.9	13.0	576.9	2.0	0.9	8.0
1994	46.0	6.9	91.1	55.0	262.0	163.0	15.0	639.0	2.0	1.0	9.0
1995	51.0	25.0	106.0	59.0	292.0	170.2	16.0	719.2	2.0	1.2	15.0
1996	62.0	22.0	120.0	63.0	323.0	196.2	16.6	802.8	3.0	1.2	16.0
1997	69.0	47.0	131.0	67.0	354.0	196.2	17.0	881.2	3.0	1.2	18.0
1998	80.0	46.0	144.0	71.0	386.0	205.2	17.6	949.8	3.0	1.2	19.0
2000	90.0	82.0	171.0	81.0	457.0	152.4	19.0	1,052.4	5.0	1.4	23.0
2005	118.0	91.0	242.0	108.0	614.0	144.4	21.0	1,338.4	7.0	2.4	31.0
2010	149.0	91.0	308.0	144.0	747.0	172.0	23.0	1,634.0	8.0	3.0	39.0
Average Annual Growth Rate (AAGR)											
1985-1995	10.3%	n.a.	11.5%	9.5%	11.8%	15.5%	9.3%	12.5%	11.8%	n.a.	17.1%
1995-2000	12.0%	26.8%	10.0%	6.5%	9.4%	(2.2%)	3.5%	7.9%	20.1%	3.1%	8.9%
2000-2005	5.6%	2.1%	7.2%	5.9%	6.1%	(1.1%)	2.0%	4.9%	7.0%	11.4%	6.2%
2005-2010	4.8%	-	4.9%	5.9%	4.0%	3.6%	1.8%	4.1%	2.7%	4.6%	4.7%

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Vietnam Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil*	Fuel Oil**	Others	Total	BK GO	DB Crude	BK FO
1985	0.2	-	10.1	5.5	16.7	9.1	0.8	42.2	-	-	-
1986	0.2	-	10.9	6.3	18.3	10.5	0.7	46.8	-	-	-
1987	0.2	-	12.4	6.3	21.7	11.6	0.7	52.9	-	-	-
1988	0.2	-	13.9	6.9	22.9	11.9	0.5	56.3	-	-	-
1989	0.2	-	11.0	8.7	20.6	9.8	1.0	51.4	-	-	-
1990	0.3	-	11.9	9.6	21.7	12.5	1.3	57.3	-	-	-
1991	0.4	-	12.5	10.0	29.0	13.5	1.1	66.5	-	-	-
1992	0.4	-	13.7	10.5	44.0	15.0	1.1	84.7	-	-	-
1993	1.4	-	17.0	16.0	49.0	20.1	1.1	104.6	-	-	-
1994	1.6	-	18.9	17.0	52.8	22.4	2.0	114.7	-	-	-
1995	1.8	-	16.0	19.0	57.0	25.0	3.0	121.8	-	-	-
1996	1.9	-	18.1	19.7	61.2	26.4	3.7	131.0	-	-	-
1997	2.1	-	20.6	20.5	65.6	27.9	4.4	141.1	-	-	-
1998	2.2	-	23.3	21.3	70.4	29.5	5.4	152.1	-	-	-
2000	2.5	-	30.0	23.0	81.0	33.0	8.0	177.5	-	-	-
2005	3.5	-	49.0	32.0	109.0	49.0	15.0	257.5	-	-	-
2010	7.0	-	66.2	45.3	135.8	64.9	27.0	346.2	-	-	-
Average Annual Growth Rate (AAGR)											
1985-1995	27.5%	n.a.	4.7%	13.2%	13.1%	10.7%	14.6%	11.2%	n.a.	n.a.	n.a.
1995-2000	6.8%	n.a.	13.4%	3.9%	7.3%	5.7%	21.7%	7.8%	n.a.	n.a.	n.a.
2000-2005	7.0%	n.a.	10.3%	6.8%	6.1%	8.2%	13.4%	7.7%	n.a.	n.a.	n.a.
2005-2010	15.0%	n.a.	6.2%	7.2%	4.5%	5.8%	12.5%	6.1%	n.a.	n.a.	n.a.

*Includes bunker gasoil (BK GO). **Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1995: actual; 1996: estimate; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

Other Asia* Petroleum Product Demand: 1985-2010

('000 b/d)

Year	LPG	Naphtha	Gasoline	Kero/jet	Gasoil**	Fuel Oil***	Others	Total	BK GO	DB Crude	BK FO
1985	6.5	5.2	53.9	60.5	106.8	94.6	9.9	337.4	5.6	-	21.3
1986	7.4	6.3	56.2	64.8	120.7	85.0	9.1	349.5	6.0	-	19.1
1987	7.9	6.3	58.4	73.2	130.0	79.9	9.3	365.0	15.7	-	20.1
1988	7.6	7.0	59.8	78.0	127.7	78.5	9.1	367.7	10.9	-	22.5
1989	8.6	5.7	61.6	80.7	130.0	80.8	9.6	377.0	6.7	-	24.1
1990	8.9	8.8	60.0	87.9	143.6	75.1	10.8	395.1	12.8	-	27.1
1991	9.2	7.6	59.6	80.2	146.5	69.2	9.2	381.5	12.4	-	22.4
1992	9.6	8.4	61.0	90.4	155.0	85.2	9.6	419.2	12.4	-	27.2
1993	10.0	8.7	63.9	97.6	164.9	81.5	10.2	436.8	12.8	-	28.9
1994	9.9	9.5	64.3	100.8	166.9	88.2	10.1	449.7	13.0	-	27.0
1995	10.2	9.9	65.4	106.1	174.3	88.9	10.4	465.2	14.2	-	27.2
1996	10.7	10.1	66.6	110.0	182.3	92.5	10.8	482.9	14.6	-	29.2
1997	11.3	10.2	67.8	112.2	187.5	94.6	11.3	494.9	14.7	-	30.2
1998	11.9	10.4	69.0	114.9	193.0	97.5	11.8	508.5	15.1	-	31.2
2000	13.2	10.8	71.6	120.0	201.2	103.0	12.7	532.5	15.9	-	32.2
2005	20.4	12.9	84.9	146.6	231.1	119.0	17.5	632.4	17.6	-	36.4
2010	31.4	17.7	116.8	184.5	303.1	134.6	23.6	811.7	20.1	-	37.5
Average Annual Growth Rate (AAGR)											
1985-1995	4.6%	6.7%	2.0%	5.8%	5.0%	(0.6%)	0.5%	3.3%	9.8%	n.a.	2.5%
1995-2000	5.3%	1.8%	1.8%	2.5%	2.9%	3.0%	4.1%	2.7%	2.3%	n.a.	3.4%
2000-2005	9.1%	3.6%	3.5%	4.1%	2.8%	2.9%	6.6%	3.5%	2.1%	n.a.	2.5%
2005-2010	9.0%	6.5%	6.6%	4.7%	5.6%	2.5%	6.2%	5.1%	2.7%	n.a.	0.6%

*Includes Bangladesh, Bhutan, Cambodia, Hong Kong, Laos, Macao, Mongolia, Myanmar, North Korea, Nepal, Sri Lanka, and the Pacific Islands. **Includes bunker gasoil (BK GO). ***Includes direct burning of crude (DB crude) and bunker fuel oil (BK FO).

Notes: 1985-1994: actual; 1995-96: estimates; 1997-2010: forecasts. n.a.=not applicable; "- "=zero value.

III. Crude Oil Production and Exports

Asia-Pacific Crude Production and Export Availability, 1995-2010

('000 b/d)

Note: Export availability refers to gross crude exports from all countries in the region.

■ Crude Production ■ Export Availability

**Australia Crude Production and Export
Availability, 1995-2010**

Note: Export availability refers to gross exports from the country.

■ Crude Production ■ Export Availability

**Brunei Crude Production and Export
Availability, 1995-2010**

('000 b/d)

Note: Export availability refers to gross exports from the country.

▨ Crude Production ■ Export Availability

China Crude Production and Export Availability, 1995-2010

('000 b/d)

Note: Export availability refers to gross exports from the country.

▨ Crude Production ■ Export Availability

**Indonesia Crude Production and Export
Availability, 1995-2010**

(*'000 b/d*)

Note: Export availability refers to gross exports from the country.

▨ Crude Production ■ Export Availability

**Malaysia Crude Production and Export
Availability, 1995-2010**

('000 b/d)

Note: Export availability refers to gross exports from the country.

■ Crude Production ■ Export Availability

Papua New Guinea Crude Production and Export Availability, 1995-2010

('000 b/d)

Note: Export availability refers to gross exports from the country.

■ Crude Production ■ Export Availability

**Vietnam Crude Production and Export
Availability, 1995-2010**

Note: Export availability refers to gross exports from the country.

▨ Crude Production ■ Export Availability

Asia-Pacific Crude Production and Net Oil Import Requirements*, 1995-2010

*Net oil import requirements are defined as the difference between total oil consumption and crude production.

■ Crude Production ▨ Net Oil Import Requirements

Australia Crude Production and Net Oil Export Potential*, 1995-2010

('000 b/d)

*Negative numbers refer to net oil (crude and products) import requirements.

■ Crude Production ▨ Net Oil Export Potential

**Brunei Crude Production and Net Oil
Export Potential*, 1995-2010**

('000 b/d)

*Net oil export potential is defined as the difference between crude production and total oil consumption.

■ Crude Production ▨ Net Oil Export Potential

China Crude Production and Net Oil Export Potential*, 1995-2010

('000 b/d)

*Negative numbers refer to net oil (crude and products) import requirements.

■ Crude Production ▨ Net Oil Export Potential

**Indonesia Crude Production and Net Oil
Export Potential*, 1995-2010**

*Negative numbers refer to net oil (crude and products) import requirements.

■ Crude Production ▨ Net Oil Export Potential

Malaysia Crude Production and Net Oil Export Potential*, 1995-2010

('000 b/d)

*Negative numbers refer to net oil (crude and products) import requirements.

■ Crude Production ▨ Net Oil Export Potential

**Vietnam Crude Production and Net Oil
Export Potential*, 1995-2010**

('000 b/d)

*Negative numbers refer to net oil (crude and products) import requirements.

■ Crude Production ▨ Net Oil Export Potential

Historical and Base-Case Forecast Crude Output in the Asia-Pacific Region, 1970-2010

Asia-Pacific Crude Production, Internal Demand and Export Availability /1, 1995-2010

('000 b/d)

Country/ Crude	API /2	1995			1997			2000			2005			2010		
		Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.
China																
Shengli	23.0	600	555	45	585	565	20	585	585	0	585	585	0	550	550	0
Daqing	33.0	1,120	828	292	1,105	860	245	1,100	940	160	950	940	10	850	850	0
Offshore	37.0	168	141	27	313	218	95	340	250	90	260	200	60	210	210	0
Xinjiang/Tarim	32.0	253	253	0	320	320	0	420	420	0	600	600	0	900	900	0
Other	31.0	835	822	13	837	837	0	825	825	0	975	975	0	990	990	0
Subtotal	30.6	2,976	2,599	377	3,160	2,800	360	3,270	3,020	250	3,370	3,300	70	3,500	3,500	0
Malaysia																
Bintulu /3	45.2	82	30	52	70	30	40	64	45	19	60	60	0	50	50	0
Labuan	33.2	65	0	65	60	0	60	58	0	58	50	40	10	45	45	0
Miri	38.0	122	40	82	115	40	75	83	43	40	80	70	10	70	70	0
Tapis	44.3	335	245	90	290	250	40	275	265	10	220	220	0	190	190	0
Dulang	39.9	82	0	82	55	0	55	45	0	45	30	0	30	25	0	25
Other	46.0	7	0	7	4	0	4	1	1	0	0	0	0	10	0	10
Subtotal	41.8	693	315	378	594	320	274	526	354	172	440	390	50	390	355	35
Indonesia																
Ardjuna	36.7	81	67	14	65	60	5	50	50	0	35	35	0	25	25	0
Arun	55.0	87	12	75	60	20	40	50	20	30	30	20	10	10	10	0
Attaka	42.3	71	28	43	65	30	35	60	30	30	45	25	20	40	25	15
Belida	34.0	108	41	67	85	60	25	60	50	10	20	20	0	0	0	0
Cinta	33.0	52	12	40	45	15	30	35	15	20	25	25	0	25	25	0
Duri /4	19.8	237	125	112	248	150	98	270	150	120	250	150	100	200	150	50
Handil	31.3	29	18	11	25	20	5	20	20	0	10	10	0	0	0	0
Minas /5	34.1	451	216	235	405	230	175	380	230	150	280	230	50	175	175	0
Widuri	32.0	87	18	69	65	20	45	55	40	15	50	50	0	35	35	0
Others /6	34.0	307	91	216	337	45	292	320	90	230	335	220	115	370	300	70
Subtotal	33.3	1,510	628	882	1,400	650	750	1,300	695	605	1,080	785	295	880	745	135

Asia-Pacific Crude Production, Internal Demand and Export Availability /1, 1995-2010

('000 b/d)

Country/ Crude	API /2	1995			1997			2000			2005			2010		
		Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.
Brunei																
Seria	36.2	25	1	24	20	1	19	20	1	19	20	1	19	20	1	19
Champion	24.6	45	9	36	45	9	36	45	9	36	45	9	36	45	9	36
Other	27.5	89	0	89	95	0	95	95	0	95	105	0	105	105	0	105
Subtotal	28.0	159	10	149	160	10	150	160	10	150	170	10	160	170	10	160
Australia																
Gippsland	46.8	230	230	0	200	200	0	200	200	0	120	120	0	80	80	0
Timor Sea	41.2	25	10	15	15	5	10	5	0	5	0	0	0	0	0	0
NW Shelf Cond.	59.5	65	20	45	95	30	65	100	40	60	130	40	90	100	40	60
Griffin	55.0	60	30	30	45	20	25	25	10	15	0	0	0	0	0	0
Cossack	47.3	5	5	0	115	50	65	50	25	25	15	15	0	5	5	0
Laminaria	58.0	0	0	0	0	0	0	140	30	110	35	15	20	10	5	5
Timor Gap /7	55.0	0	0	0	0	0	0	5	0	5	35	0	35	20	0	20
Wandoo/Stag	19.0	15	0	15	35	0	35	25	0	25	10	0	10	0	0	0
Others	44.0	110	55	55	75	40	35	50	30	20	40	30	10	40	30	10
Subtotal	47.1	510	350	160	580	345	235	600	335	265	385	220	165	255	160	95
PNG /8																
Kutubu	44.0	99	0	99	90	0	90	75	0	75	65	35	30	40	35	5
Vietnam																
Bach Ho	38.6	130	0	130	100	0	100	50	0	50	30	0	30	25	0	25
Dai Hung	30.7	27	0	27	40	0	40	50	0	50	50	50	0	50	50	0
Rong	36.0	20	0	20	20	0	20	20	0	20	10	0	10	5	5	0
Rang Dong	38.0	0	0	0	0	0	0	50	0	50	50	40	10	50	40	10
Other /9	31.5	0	0	0	20	0	20	40	0	40	75	30	45	80	35	45
Subtotal	37.1	177	0	177	180	0	180	210	0	210	215	120	95	210	130	80

Asia-Pacific Crude Production, Internal Demand and Export Availability /1, 1995-2010

('000 b/d)

Country/ Crude	API /2	1995			1997			2000			2005			2010		
		Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.	Prod.	Dem.	Avail.
India																
Bombay H	39.4	465	465	0	385	385	0	318	318	0	388	388	0	410	410	0
Assamese	29.3	100	100	0	170	170	0	127	127	0	161	161	0	195	195	0
N.Gujarati	29.7	100	100	0	125	125	0	122	122	0	160	160	0	180	180	0
S.Gujarati/others	45.1	35	35	0	85	85	0	286	286	0	313	313	0	235	235	0
Subtotal	36.9	700	700	0	765	765	0	853	853	0	1,022	1,022	0	1,020	1,020	0
Philippines																
Linapacan	33.5	3	3	0	25	25	0	50	50	0	50	50	0	40	40	0
Others /10	39.5	179	160	19	247	213	34	276	269	7	228	228	0	232	215	17
Total	34.6	7,006	4,765	2,241	7,201	5,128	2,073	7,320	5,586	1,734	7,025	6,160	865	6,737	6,210	527

Notes:

1. Internal demand refers to runs of domestic crude and export availability represents gross figure and excludes crude imports.
2. API in country subtotal and regional total are weighted average API numbers for 1994.
3. Crude and condensates, but API number refers to crude only.
4. Net production, assuming one-fifth of gross production is used for steamflood EOR until 1997; Crude burning will be replaced by gas thereafter.
5. Exclude potential EOR.
6. Include new Condensates and potential EOR of existing fields.
7. Refers to the Zone of Cooperation Area (ZOCA), which is jointly developed by Australia and Indonesia.
8. Assuming new production from other fields starting in 2000.
9. Blue Dragon, Jade, and others.
10. Includes estimates for Thailand, New Zealand, Myanmar, Pakistan, Bangladesh, Japan, Taiwan, and others.

IV. Import Dependence

Asia-Pacific Petroleum Product Demand, Net Oil Import Requirements and Dependence, 1995-2010

Note: Oil dependence is defined as share of net oil import requirements in total regional oil demand.

Petroleum Product Demand

 Net Import Requirement

□ Oil Dependence (%)

**Asia-Pacific Overall Oil (Crude and Products)
Import Dependence, 1995-2010**

Note: The oil import dependence is the share of net import requirements in total oil demand.

Asia-Pacific Oil Import Dependence, 1995-2010

('000 b/d)

	1995	1997	2000	2005	2010
Oil Demand	17,521	18,981	21,365	25,341	29,386
Oil Production	7,006	7,201	7,320	7,025	6,737
Net Import Requirements	10,514	11,780	14,045	18,316	22,649
Oil Dependence*	60%	62%	66%	72%	77%

*Defined as share of net oil import requirements in total demand.

Structure of the Crude Oil Supply in the Asia-Pacific Region, 1995-2010

**Crude Oil Imports of Asia-Pacific Countries
and Share of the Middle East, 1995-2010**

('000 b/d)

	1995	1997	2000	2005	2010
Crude Imports*	10,358	11,952	12,965	17,071	20,730
Crude Imports from the Middle East	7,780	9,268	10,239	14,866	18,544
Share of the Middle East	75%	78%	79%	87%	89%
*Intraregional crude oil trade is included.					

Source of Asia-Pacific Oil (Crude and Products) Imports, 1995*

*Extra-regional imports only, totalling 10.7 million b/d in 1995.

V. Crude and Product Pricing Assumptions

Price Forecasts of Selected Crudes, Base Case

US\$ per barrel

Price Forecasts for Selected Oil Products: Base Case

US\$ per barrel

LSWR/HSFO Prices and Differential: Base Case

Diesel/Gasoline Prices and Differential: Base Case

Gasoline/Naphtha Prices and Differential: Base Case

Base Price Forecast*

(US\$ per barrel)

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Light	\$16.25	\$17.10	\$16.60	\$16.90	\$17.20	\$20.00	\$23.19	\$26.88
Arab Heavy	\$15.53	\$16.34	\$15.36	\$15.49	\$15.52	\$18.21	\$21.12	\$24.48
Minas	\$17.50	\$18.42	\$18.50	\$19.00	\$19.85	\$22.95	\$26.61	\$30.84
Tapis	\$18.18	\$19.13	\$19.96	\$20.51	\$21.89	\$25.09	\$29.09	\$33.73
Light Naphtha	\$17.67	\$18.35	\$18.10	\$18.30	\$21.75	\$25.05	\$28.64	\$32.43
92 RONC	\$22.22	\$22.55	\$21.90	\$22.10	\$25.10	\$28.30	\$31.69	\$35.43
97 RONC	\$24.50	\$24.87	\$24.12	\$24.42	\$27.64	\$31.51	\$35.33	\$39.07
97 RONL	\$22.94	\$24.35	\$22.65	\$22.85	\$26.35	\$29.45	\$32.84	\$36.58
Kerojet	\$22.29	\$25.35	\$25.30	\$25.85	\$28.58	\$31.35	\$34.59	\$38.33
IDO/MDO	\$20.16	\$22.55	\$22.40	\$23.11	\$25.45	\$27.70	\$30.94	\$34.68
Diesel 0.5%	\$21.46	\$23.90	\$23.80	\$24.60	\$27.25	\$29.50	\$32.74	\$36.48
Diesel 0.2%	\$22.31	\$24.60	\$24.40	\$25.10	\$27.95	\$30.70	\$33.94	\$37.68
Diesel 0.05%	\$22.91	\$26.00	\$26.20	\$26.60	\$29.20	\$31.95	\$35.19	\$38.93
HSFO	\$13.85	\$14.10	\$13.10	\$12.40	\$13.20	\$15.50	\$17.94	\$21.48
LSWR	\$14.13	\$16.10	\$15.30	\$15.00	\$17.05	\$19.90	\$23.59	\$27.33

Differentials with Arab Light

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Heavy	(\$0.72)	(\$0.76)	(\$1.24)	(\$1.41)	(\$1.68)	(\$1.79)	(\$2.07)	(\$2.40)
Minas	\$1.25	\$1.32	\$1.90	\$2.10	\$2.65	\$2.95	\$3.42	\$3.96
Tapis	\$1.93	\$2.03	\$3.36	\$3.61	\$4.69	\$5.09	\$5.90	\$6.85
Naphtha	\$1.42	\$1.25	\$1.50	\$1.40	\$4.55	\$5.05	\$5.45	\$5.55
92 RONC	\$5.97	\$5.45	\$5.30	\$5.20	\$7.90	\$8.30	\$8.50	\$8.55
Kerojet	\$6.04	\$8.25	\$8.70	\$8.95	\$11.38	\$11.35	\$11.40	\$11.45
Diesel 0.5%	\$5.21	\$6.80	\$7.20	\$7.70	\$10.05	\$9.50	\$9.55	\$9.60
Diesel 0.2%	\$6.06	\$7.50	\$7.80	\$8.20	\$10.75	\$10.70	\$10.75	\$10.80
HSFO	(\$2.40)	(\$3.00)	(\$3.50)	(\$4.50)	(\$4.00)	(\$4.50)	(\$5.25)	(\$5.40)
LSWR	(\$2.12)	(\$1.00)	(\$1.30)	(\$1.90)	(\$0.15)	(\$0.10)	\$0.40	\$0.45

Interproduct Differentials

	1995	1996	1997	1998	2000	2005	2010	2015
LSWR-HSFO	\$0.28	\$2.00	\$2.20	\$2.60	\$3.85	\$4.40	\$5.65	\$5.85
0.5 Dsl-92RONC	(\$0.76)	\$1.35	\$1.90	\$2.50	\$2.15	\$1.20	\$1.05	\$1.05
92 RONC-Nap	\$4.55	\$4.20	\$3.80	\$3.80	\$3.35	\$3.25	\$3.05	\$3.00
Dsl 0.2-0.5	\$0.85	\$0.70	\$0.60	\$0.50	\$0.70	\$1.20	\$1.20	\$1.20
Dsl 0.05-0.2	\$0.60	\$1.40	\$1.80	\$1.50	\$1.25	\$1.25	\$1.25	\$1.25
Tapis-Minas	\$0.68	\$0.71	\$1.46	\$1.51	\$2.04	\$2.14	\$2.48	\$2.89

*In constant 1995 dollars. Product prices at Singapore market.

High Price Forecast*
(US\$ per barrel)

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Light	\$16.25	\$17.10	\$20.60	\$21.00	\$21.70	\$25.00	\$30.41	\$37.00
Arab Heavy	\$15.53	\$16.34	\$19.10	\$19.20	\$19.40	\$23.06	\$28.46	\$35.03
Minas	\$17.50	\$18.42	\$22.95	\$23.37	\$24.20	\$27.64	\$33.39	\$40.09
Tapis	\$18.18	\$19.13	\$25.20	\$25.87	\$27.20	\$30.99	\$36.70	\$43.41
Light Naphtha	\$17.67	\$18.35	\$22.10	\$22.60	\$26.05	\$30.10	\$36.41	\$43.15
92 RONC	\$22.22	\$22.55	\$25.90	\$26.40	\$29.65	\$33.50	\$39.61	\$46.35
97 RONC	\$24.50	\$24.86	\$28.14	\$28.71	\$32.04	\$36.44	\$42.86	\$49.73
97 RONL	\$22.94	\$24.35	\$26.67	\$27.16	\$30.99	\$34.77	\$40.86	\$47.60
Kerojet	\$22.29	\$25.35	\$29.70	\$30.15	\$34.03	\$37.15	\$42.56	\$49.15
IDO/MDO	\$20.16	\$22.55	\$26.80	\$27.41	\$30.90	\$33.50	\$38.91	\$45.50
Diesel 0.5%	\$21.46	\$23.90	\$28.20	\$28.90	\$32.70	\$35.30	\$40.71	\$47.30
Diesel 0.2%	\$22.31	\$24.60	\$28.80	\$29.40	\$33.40	\$36.50	\$41.91	\$48.50
Diesel 0.05%	\$22.91	\$26.00	\$30.60	\$30.90	\$34.65	\$37.75	\$43.16	\$49.75
HSFO	\$13.85	\$14.10	\$17.10	\$16.50	\$16.50	\$18.50	\$23.71	\$30.10
LSWR	\$14.13	\$16.10	\$19.30	\$19.10	\$21.55	\$24.90	\$30.81	\$37.40

Differentials with Arab Light

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Heavy	(\$0.72)	(\$0.76)	(\$1.50)	(\$1.80)	(\$2.30)	(\$1.94)	(\$1.95)	(\$1.97)
Minas	\$1.25	\$1.32	\$2.35	\$2.37	\$2.50	\$2.64	\$2.98	\$3.09
Tapis	\$1.93	\$2.03	\$4.60	\$4.87	\$5.50	\$5.99	\$6.29	\$6.41
Naphtha	\$1.42	\$1.25	\$1.50	\$1.60	\$4.35	\$5.10	\$6.00	\$6.15
92 RONC	\$5.97	\$5.45	\$5.30	\$5.40	\$7.95	\$8.50	\$9.20	\$9.35
Kerojet	\$6.04	\$8.25	\$9.10	\$9.15	\$12.33	\$12.15	\$12.15	\$12.15
Diesel 0.5%	\$5.21	\$6.80	\$7.60	\$7.90	\$11.00	\$10.30	\$10.30	\$10.30
Diesel 0.2%	\$6.06	\$7.50	\$8.20	\$8.40	\$11.70	\$11.50	\$11.50	\$11.50
HSFO	(\$2.40)	(\$3.00)	(\$3.50)	(\$4.50)	(\$5.20)	(\$6.50)	(\$6.70)	(\$6.90)
LSWR	(\$2.12)	(\$1.00)	(\$1.30)	(\$1.90)	(\$0.15)	(\$0.10)	\$0.40	\$0.40

Interproduct Differentials

	1995	1996	1997	1998	2000	2005	2010	2015
LSWR-HSFO	\$0.28	\$2.00	\$2.20	\$2.60	\$5.05	\$6.40	\$7.10	\$7.30
0.5 Dsl-92RONC	(\$0.76)	\$1.35	\$2.30	\$2.50	\$3.05	\$1.80	\$1.10	\$0.95
92 RONC-Nap	\$4.55	\$4.20	\$3.80	\$3.80	\$3.60	\$3.40	\$3.20	\$3.20
Dsl 0.2-0.5	\$0.85	\$0.70	\$0.60	\$0.50	\$0.70	\$1.20	\$1.20	\$1.20
Dsl 0.05-0.2	\$0.60	\$1.40	\$1.80	\$1.50	\$1.25	\$1.25	\$1.25	\$1.25
Tapis-Minas	\$0.68	\$0.71	\$2.25	\$2.50	\$3.00	\$3.35	\$3.31	\$3.32

*In constant 1995 dollars. Product prices at Singapore market.

Low Price Forecast*

(US\$ per barrel)

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Light	\$16.25	\$16.90	\$12.60	\$12.60	\$12.70	\$15.00	\$17.32	\$20.00
Arab Heavy	\$15.53	\$16.14	\$11.55	\$11.56	\$11.45	\$13.75	\$15.94	\$18.48
Minas	\$17.50	\$18.22	\$14.75	\$14.73	\$15.05	\$17.35	\$19.92	\$22.86
Tapis	\$18.18	\$18.93	\$15.75	\$15.73	\$17.42	\$20.17	\$23.03	\$26.30
Light Naphtha	\$17.67	\$18.15	\$14.10	\$14.70	\$17.60	\$20.70	\$23.72	\$26.70
92 RONC	\$22.22	\$22.35	\$17.90	\$18.40	\$20.80	\$23.80	\$26.72	\$29.60
97 RONC	\$24.50	\$24.68	\$20.11	\$20.73	\$23.41	\$27.26	\$30.73	\$33.73
97 RONL	\$22.94	\$24.15	\$18.65	\$19.10	\$22.03	\$24.90	\$27.82	\$30.70
Kerojet	\$22.29	\$25.15	\$21.60	\$22.05	\$24.55	\$26.90	\$29.42	\$32.45
IDO/MDO	\$20.16	\$22.35	\$18.60	\$19.05	\$21.20	\$22.70	\$25.02	\$27.80
Diesel 0.5%	\$21.46	\$23.70	\$20.10	\$20.70	\$23.10	\$24.80	\$27.22	\$30.10
Diesel 0.2%	\$22.31	\$24.40	\$20.80	\$21.45	\$23.95	\$26.15	\$28.67	\$31.60
Diesel 0.05%	\$22.91	\$25.80	\$22.50	\$22.80	\$25.25	\$27.35	\$29.82	\$32.75
HSFO	\$13.85	\$13.90	\$9.10	\$8.10	\$8.70	\$10.50	\$12.52	\$15.00
LSWR	\$14.13	\$15.90	\$11.30	\$10.70	\$12.55	\$14.90	\$17.77	\$20.65

Differentials with Arab Light

	1995	1996	1997	1998	2000	2005	2010	2015
Arab Heavy	(\$0.72)	(\$0.76)	(\$1.05)	(\$1.04)	(\$1.25)	(\$1.25)	(\$1.38)	(\$1.52)
Minas	\$1.25	\$1.32	\$2.15	\$2.13	\$2.35	\$2.35	\$2.60	\$2.86
Tapis	\$1.93	\$2.03	\$3.15	\$3.13	\$4.72	\$5.17	\$5.71	\$6.30
Naphtha	\$1.42	\$1.25	\$1.50	\$2.10	\$4.90	\$5.70	\$6.40	\$6.70
92 RONC	\$5.97	\$5.45	\$5.30	\$5.80	\$8.10	\$8.80	\$9.40	\$9.60
Kerojet	\$6.04	\$8.25	\$9.00	\$9.45	\$11.85	\$11.90	\$12.10	\$12.45
Diesel 0.5%	\$5.21	\$6.80	\$7.50	\$8.10	\$10.40	\$9.80	\$9.90	\$10.10
Diesel 0.2%	\$6.06	\$7.50	\$8.20	\$8.85	\$11.25	\$11.15	\$11.35	\$11.60
HSFO	(\$2.40)	(\$3.00)	(\$3.50)	(\$4.50)	(\$4.00)	(\$4.50)	(\$4.80)	(\$5.00)
LSWR	(\$2.12)	(\$1.00)	(\$1.30)	(\$1.90)	(\$0.15)	(\$0.10)	\$0.45	\$0.65

Interproduct Differentials

	1995	1996	1997	1998	2000	2005	2010	2015
LSWR-HSFO	\$0.28	\$2.00	\$2.20	\$2.60	\$3.85	\$4.40	\$5.25	\$5.65
0.5 Dsl-92RONC	(\$0.76)	\$1.35	\$2.20	\$2.30	\$2.30	\$1.00	\$0.50	\$0.50
92 RONC-Nap	\$4.55	\$4.20	\$3.80	\$3.70	\$3.20	\$3.10	\$3.00	\$2.90
Dsl 0.2-0.5	\$0.85	\$0.70	\$0.70	\$0.75	\$0.85	\$1.35	\$1.45	\$1.50
Dsl 0.05-0.2	\$0.60	\$1.40	\$1.70	\$1.35	\$1.30	\$1.20	\$1.15	\$1.15
Tapis-Minas	\$0.68	\$0.71	\$1.00	\$1.00	\$2.37	\$2.82	\$3.11	\$3.44

*In constant 1995 dollars. Product prices at Singapore market.

VI. Market Share of Refined Products by Suppliers in Selected Countries

**Overall Market Share for Refined Products
by Suppliers in Selected Countries**

**Overall Market Share for Refined Products by
Suppliers in Selected Countries, Continued**

South Korea

Thailand

**Overall Market Share for Refined Products by
Suppliers in Selected Countries, Continued**

Philippines

Australia

Japan's Current Market Share for Individual Refined Products

Japan's Current Market Share for Individual Refined Products, Continued

Naphtha

Jet Fuel

Japan's Current Market Share for Individual Refined Products, Continued

Kerosene

Automotive Diesel

Japan's Current Market Share for Individual Refined Products, Continued

Industrial Diesel

Fuel Oil (Onshore)

Japan's Current Market Share for Individual Refined Products, Continued

Fuel Oil (Bunkers)

New Zealand's Current Market Share for Individual Refined Products

LPG

Gasoline

New Zealand's Market Share for Individual Refined Products, Continued

New Zealand Market Share for Individual Refined Products, Continued

Fuel Oil (Onshore)

Fuel Oil (Bunkers)

Philippines: Market Share for Individual Refined Products

LPG

Gasoline

Philippines: Market Share for Individual Refined Products, Continued

Naphtha

Jet Fuel

Philippines: Market Share for Individual Refined Products, Continued

Kerosene

Industrial Diesel

Philippines: Market Share for Individual Refined Products, Continued

South Korea's Current Market Share for Individual Refined Products

South Korea's Market Share for Individual Refined Products, Continued

South Korea's Market Share for Individual Refined Products, Continued

South Korea's Market Share for Individual Refined Products, Continued

Thailand's Current Market Share for Individual Refined Products

Thailand's Market Share for Individual Refined Products, Continued

*Share of Bangchak is 0.1%

Thailand's Market Share for Individual Refined Products, Continued

Automotive Diesel

Industrial Diesel

Thailand's Market Share for Individual Refined Products, Continued

Fuel Oil (Onshore)

Fuel Oil (Bunkers)

VII. Refining Margins

**Gross Refining Margins (US\$/bbl), Dubai Crude
Singapore FOB Product Prices**

Note: Margins reflect a constant freight cost of US\$0.65/bbl for crude from Arab Gulf to Singapore to calculate CIF crude prices; Cracking yield is based on RCC; Product prices taken from Platts.

Recent Gross Refining Margins for Dubai in Singapore Market (US\$/bbl)

Month	Hydroskimming	Cracking
Jan-95	\$1.24	\$3.08
Feb-95	\$1.10	\$2.38
Mar-95	\$1.53	\$2.96
Apr-95	\$0.82	\$2.35
May-95	\$1.25	\$2.96
Jun-95	\$1.17	\$3.91
Jul-95	\$1.17	\$4.48
Aug-95	\$0.42	\$3.16
Sep-95	\$0.32	\$2.78
Oct-95	\$1.49	\$3.37
Nov-95	\$1.90	\$4.14
Dec-95	\$2.69	\$4.02
Jan-96	\$3.94	\$4.72
Feb-96	\$3.65	\$5.14
Mar-96	\$2.67	\$4.92
Apr-96	\$2.42	\$4.70
May-96	\$2.45	\$5.98
Jun-96	\$0.48	\$3.67
Jul-96	\$0.46	\$3.06
Aug-96	\$0.73	\$2.69
Sep-96	\$1.10	\$2.60
Oct-96	\$0.84	\$2.83
Nov-96	\$2.07	\$4.26
Dec-96	\$2.19	\$4.39

Notes: Margins reflect a constant freight cost of US\$0.65/bbl for crude from Arab Gulf
 CIF prices; Cracking yield is based on RCC.

**Past and Projected Gross Refining Margins (Arab Light),
Singapore Market (US\$/bbl)***

Note: * Nominal\$ up to 1996, 1995\$ thereafter;
Cracking yield is based on RCC

**Past and Projected
Gross Refining Margins for
Arab Light in Singapore Market
(US\$ per barrel)**

	Hydroskimming	Cracking
1979	(\$1.29)	\$5.79
1980	(\$1.33)	\$5.36
1981	\$0.64	\$6.89
1982	(\$1.44)	\$4.67
1983	\$2.03	\$6.45
1984	\$0.52	\$3.05
1985	(\$1.32)	\$2.09
1986	\$0.82	\$4.24
1987	\$0.43	\$3.72
1988	\$1.04	\$3.72
1989	\$1.52	\$4.50
1990	\$2.10	\$8.34
1991	\$3.41	\$9.43
1992	\$1.18	\$6.72
1993	\$1.61	\$6.90
1994	\$0.39	\$3.91
1995	\$0.04	\$3.43
1996	\$0.01	\$3.62
1997	\$0.70	\$4.63
1998	\$0.46	\$4.58
1999	\$1.05	\$5.58
2000	\$1.95	\$7.33
2001	\$2.05	\$7.59
2002	\$1.98	\$7.52
2003	\$1.91	\$7.44
2004	\$1.84	\$7.37
2005	\$1.77	\$7.31
2010	\$1.45	\$7.37

note:

Up to 1996 actual (in nominal prices);

1997-onwards projection (in 1995 US dollars)

Cracking yield is based on RCC.