



Asia-Pacific
Economic Cooperation

APEC ENERGY HANDBOOK 2 0 0 3

**Energy Working Group
November 2005**

Coordinating Agency:

**The Energy Data and Modelling Center
The Institute of Energy Economics, Japan**





Prepared By

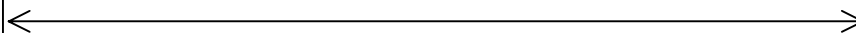
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Preface

APEC Energy Handbook 2003 is a handy, pocket-sized summary of key energy data and a supplement to APEC Energy Statistics 2003 which has been released at November 2004 from APEC Secretariat in Singapore.

This handbook consists of the following parts:

1. Primary Energy Supply
2. Transformation
3. Final Energy Consumption
4. Energy Balances
5. Outlook
6. Energy Indicators

The Supply part describes Total Primary Energy Supply by energies while Transformation part shows Oil refining and Power Generation. The Consumption part indicates both Final Energy Consumption by Sectors and Consumption by fossil energies. The Energy Balances part includes regional energy balance tables while Outlook part shows projected energy demand by year 2020 under a BAU (Business As Usual) case which was prepared by Asia Pacific Energy Research Centre as of September 2002. The Energy Indicators part contains several indicators based on Population, GDP and Energy consumption amount.

This handbook has been derived from the APEC Energy Database, the purpose of which is to establish a comprehensive and consistent energy database within the APEC region. This database will be used to assist in the identification of significant trends in energy supply and demand consistent with projects and priorities under the APEC Energy Working Group. It has been prepared in close cooperation with twenty-one member economies.

Inquiries about figures and graphs in this handbook could be addressed to The Energy Data and Modelling Center, The Institute of Energy Economics, Japan.

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Definition of Region

	APEC 21	APEC 19	East Asia	Other East Asia	South-east Asia	Oceania	North America	Latin America
Australia	0	0				0		
Brunei Darussalam	0	0			0			
Canada	0	0					0	
Chile	0	0						0
China	0	0	0					
Hong Kong, China	0	0	0	0				
Indonesia	0	0			0			
Japan	0	0	0					
Republic of Korea	0	0	0	0				
Malaysia	0	0			0			
Mexico	0	0						0
New Zealand	0	0				0		
Papua New Guinea	0	0				0		
Peru	0	0						0
Philippines	0	0			0			
Russia	0							
Singapore	0	0			0			
Chinese Taipei	0	0	0	0				
Thailand	0	0			0			
United States of America	0	0					0	
Viet Nam	0							

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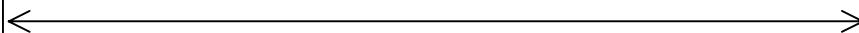


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Primary Energy Supply

Total Primary Energy Supply by Energy APEC 19

	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	800.3	1,140.5	1,270.7	1,335.9	1,438.5	1,585.9
Oil	1,426.7	1,498.9	1,851.8	1,837.4	1,841.7	1,981.0
Gas++	604.6	637.9	890.9	866.5	900.1	911.9
Nuclear	99.3	242.4	343.7	349.3	355.4	341.9
Hydro	65.5	79.0	94.3	90.7	96.9	97.9
Others	34.6	51.4	84.9	83.4	86.3	87.0
Total	3,030.9	3,650.0	4,536.3	4,563.2	4,719.0	5,005.6

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	26.4	31.2	28.0	29.3	30.5	31.7
Oil	47.1	41.1	40.8	40.3	39.0	39.6
Gas++	19.9	17.5	19.6	19.0	19.1	18.2
Nuclear	3.3	6.6	7.6	7.7	7.5	6.8
Hydro	2.2	2.2	2.1	2.0	2.1	2.0
Others	1.1	1.4	1.9	1.8	1.8	1.7

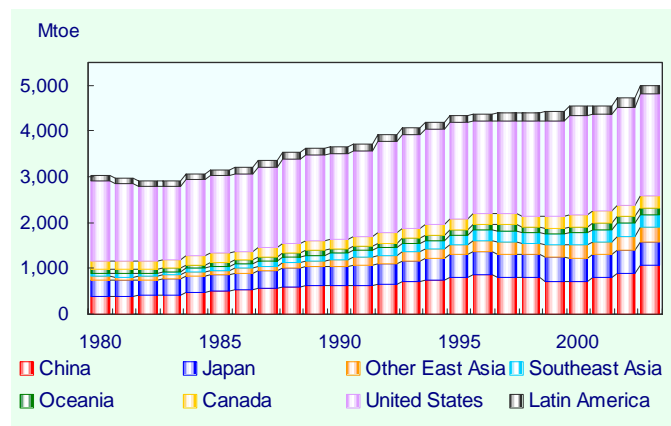
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Total Primary Energy Supply by Region APEC 19



	Mtoe					
	1980	1990	2000	2001	2002	2003
China	399.6	621.2	721.1	792.2	902.7	1,067.7
Japan	352.6	432.5	509.3	507.7	500.6	498.2
Other East Asia	68.7	146.0	282.0	290.0	304.0	322.5
Southeast Asia	71.4	133.5	270.5	266.6	280.7	293.3
Oceania	79.4	103.0	127.6	131.4	139.8	143.8
Canada	194.2	206.0	263.5	262.3	256.5	271.1
United States	1,748.6	1,863.6	2,173.1	2,126.0	2,147.7	2,217.0
Latin America	116.3	144.2	189.2	187.1	187.0	192.1
APEC 19	3,030.9	3,650.0	4,536.3	4,563.2	4,719.0	5,005.6

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	13.2	17.0	15.9	17.4	19.1	21.3
Japan	11.6	11.9	11.2	11.1	10.6	10.0
Other East Asia	2.3	4.0	6.2	6.4	6.4	6.4
Southeast Asia	2.4	3.7	6.0	5.8	5.9	5.9
Oceania	2.6	2.8	2.8	2.9	3.0	2.9
Canada	6.4	5.6	5.8	5.7	5.4	5.4
United States	57.7	51.1	47.9	46.6	45.5	44.3
Latin America	3.8	4.0	4.2	4.1	4.0	3.8

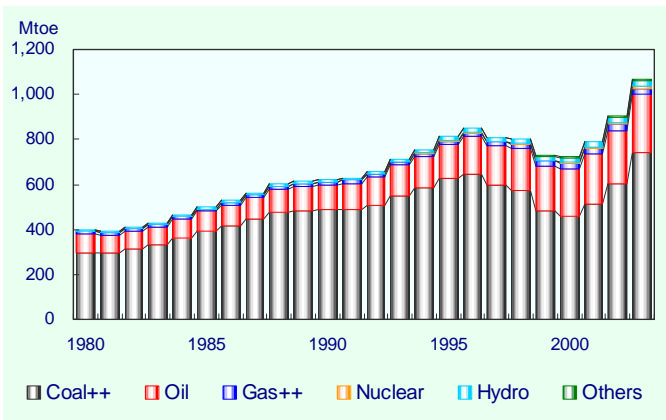
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Primary Energy Supply

Total Primary Energy Supply by Energy China



	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	297.2	486.5	457.5	515.5	604.7	738.9
Oil	83.6	108.7	213.9	219.3	235.4	261.4
Gas++	12.0	12.8	22.8	25.4	27.4	27.8
Nuclear	-	-	4.4	4.6	6.5	11.3
Hydro	5.1	10.9	19.1	23.9	24.8	24.4
Others	1.8	2.3	3.4	3.6	3.9	4.0
Total	399.6	621.2	721.1	792.2	902.7	1,067.7

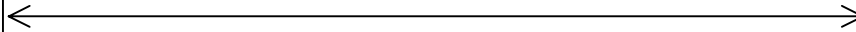
	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	74.4	78.3	63.5	65.1	67.0	69.2
Oil	20.9	17.5	29.7	27.7	26.1	24.5
Gas++	3.0	2.1	3.2	3.2	3.0	2.6
Nuclear	-	-	0.6	0.6	0.7	1.1
Hydro	1.3	1.8	2.7	3.0	2.7	2.3
Others	0.5	0.4	0.5	0.5	0.4	0.4

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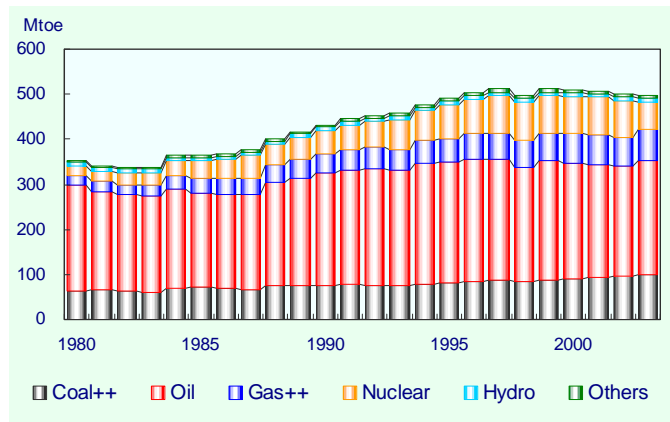
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Total Primary Energy Supply by Energy Japan



	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	63.6	75.6	91.0	94.8	95.8	100.8
Oil	233.7	249.1	255.8	248.1	244.4	250.8
Gas++	21.7	43.5	64.9	67.3	64.4	71.8
Nuclear	21.5	51.0	83.3	83.7	82.1	60.0
Hydro	7.8	7.8	7.5	7.4	7.5	8.3
Others	4.3	5.5	6.7	6.4	6.5	6.4
Total	352.6	432.5	509.3	507.7	500.6	498.2

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	18.0	17.5	17.9	18.7	19.1	20.2
Oil	66.3	57.6	50.2	48.9	48.8	50.3
Gas++	6.2	10.1	12.8	13.3	12.9	14.4
Nuclear	6.1	11.8	16.4	16.5	16.4	12.1
Hydro	2.2	1.8	1.5	1.5	1.5	1.7
Others	1.2	1.3	1.3	1.3	1.3	1.3

Primary Energy Supply

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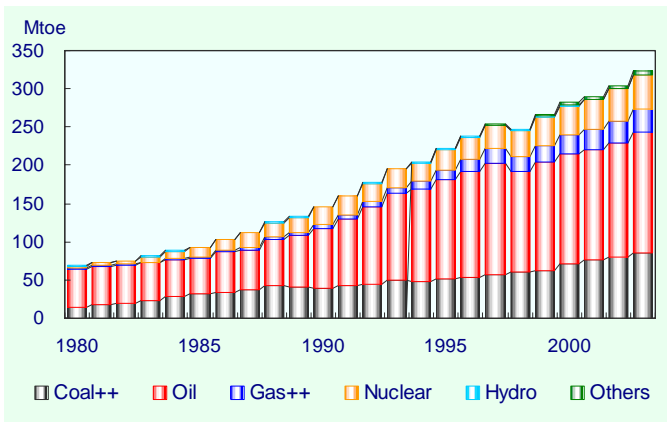
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Primary Energy Supply

Total Primary Energy Supply by Energy Other East Asia



	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	14.1	39.8	71.9	76.2	80.7	85.3
Oil	49.6	78.3	142.9	144.1	147.6	157.4
Gas++	1.6	4.4	24.6	26.8	29.7	30.8
Nuclear	3.0	22.3	38.4	38.5	41.3	43.9
Hydro	0.4	1.3	1.2	1.1	1.0	1.2
Others	-0.0	-0.2	2.9	3.3	3.6	3.9
Total	68.7	146.0	282.0	290.0	304.0	322.5

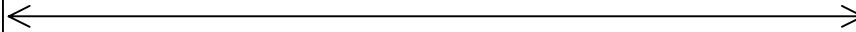
	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	20.6	27.3	25.5	26.3	26.5	26.5
Oil	72.1	53.6	50.7	49.7	48.6	48.8
Gas++	2.3	3.0	8.7	9.2	9.8	9.6
Nuclear	4.4	15.3	13.6	13.3	13.6	13.6
Hydro	0.6	0.9	0.4	0.4	0.3	0.4
Others	-0.0	-0.1	1.0	1.2	1.2	1.2

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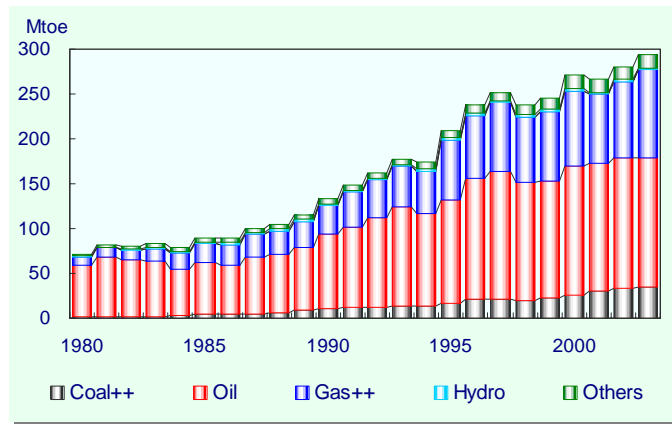
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Total Primary Energy Supply by Energy Southeast Asia



Primary Energy Supply

	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	0.9	10.3	25.2	30.9	33.3	34.9
Oil	57.8	83.8	144.8	141.7	145.5	143.7
Gas++	9.9	31.4	83.2	76.9	84.8	98.0
Nuclear	-	-	-	-	-	-
Hydro	0.9	2.2	2.6	2.7	2.6	2.5
Others	1.9	5.7	14.7	14.4	14.5	14.2
Total	71.4	133.5	270.5	266.6	280.7	293.3

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	1.3	7.7	9.3	11.6	11.9	11.9
Oil	81.0	62.8	53.5	53.1	51.8	49.0
Gas++	13.9	23.6	30.7	28.9	30.2	33.4
Nuclear	-	-	-	-	-	-
Hydro	1.2	1.7	1.0	1.0	0.9	0.9
Others	2.6	4.3	5.4	5.4	5.2	4.8

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Primary Energy Supply

Total Primary Energy Supply by Energy Oceania

The chart illustrates the growth of primary energy supply in Oceania from 1980 to 2003. Coal remains the dominant source, followed by oil and gas. Hydro and other sources contribute smaller but stable shares. The total supply increases from approximately 79.4 Mtoe in 1980 to 143.8 Mtoe in 2003.

	1980	1990	2000	2001	2002	Mtoe 2003
Coal++	27.5	36.3	47.2	44.1	51.6	51.2
Oil	34.9	37.2	42.2	40.0	43.3	46.0
Gas++	8.6	18.8	25.0	34.6	30.8	29.2
Nuclear	-	-	-	-	-	-
Hydro	2.9	3.3	3.6	3.4	3.6	3.5
Others	5.5	7.4	9.5	9.2	10.5	13.9
Total	79.4	103.0	127.6	131.4	139.8	143.8

	1980	1990	2000	2001	2002	Share (%) 2003
Coal++	34.7	35.3	37.0	33.6	36.9	35.6
Oil	44.0	36.1	33.0	30.5	30.9	32.0
Gas++	10.8	18.2	19.6	26.3	22.0	20.3
Nuclear	-	-	-	-	-	-
Hydro	3.6	3.2	2.8	2.6	2.6	2.5
Others	7.0	7.2	7.5	7.0	7.5	9.7

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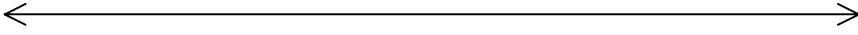
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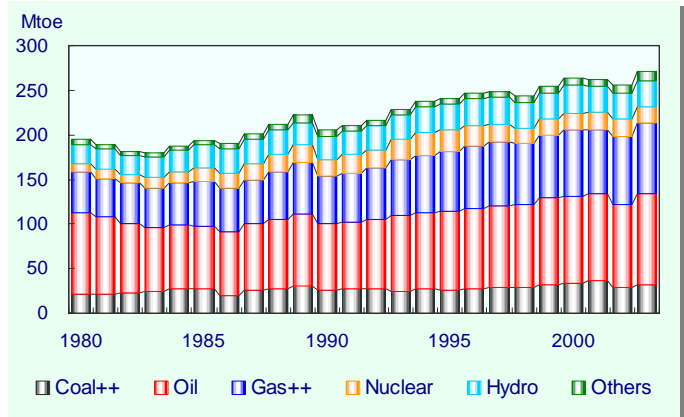
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Total Primary Energy Supply by Energy Canada



Primary Energy Supply

	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	21.3	26.3	33.4	35.9	29.1	31.8
Oil	90.9	73.8	97.1	97.6	92.9	102.1
Gas++	45.9	54.3	75.2	71.7	75.3	79.2
Nuclear	9.3	17.9	19.0	20.0	19.7	18.4
Hydro	21.8	25.5	30.8	28.6	29.8	28.7
Others	5.1	8.1	8.1	8.5	9.6	10.8
Total	194.2	206.0	263.5	262.3	256.5	271.1

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	11.0	12.8	12.7	13.7	11.4	11.7
Oil	46.8	35.8	36.8	37.2	36.2	37.7
Gas++	23.6	26.4	28.5	27.3	29.4	29.2
Nuclear	4.8	8.7	7.2	7.6	7.7	6.8
Hydro	11.2	12.4	11.7	10.9	11.6	10.6
Others	2.6	3.9	3.1	3.2	3.7	4.0

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Primary Energy Supply

Total Primary Energy Supply by Energy United States of America

The chart illustrates the composition of the United States' primary energy supply over time. Coal and oil are the dominant sources, with coal's share increasing significantly from 1980 to 2003. Gas supply also shows a steady increase. Nuclear power's contribution grows from the late 1980s onwards. Hydro and other sources remain relatively stable and small in total supply.

	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	371.7	459.4	533.7	528.0	531.7	530.7
Oil	807.8	786.1	850.8	844.5	835.1	921.4
Gas++	473.4	435.4	547.5	514.8	535.3	519.2
Nuclear	65.4	150.3	196.4	200.3	203.3	205.4
Hydro	24.0	24.3	23.5	17.9	22.0	24.0
Others	6.3	8.1	21.2	20.4	20.3	16.4
Total	1,748.6	1,863.6	2,173.1	2,126.0	2,147.7	2,217.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	21.3	24.7	24.6	24.8	24.8	23.9
Oil	46.2	42.2	39.2	39.7	38.9	41.6
Gas++	27.1	23.4	25.2	24.2	24.9	23.4
Nuclear	3.7	8.1	9.0	9.4	9.5	9.3
Hydro	1.4	1.3	1.1	0.8	1.0	1.1
Others	0.4	0.4	1.0	1.0	0.9	0.7

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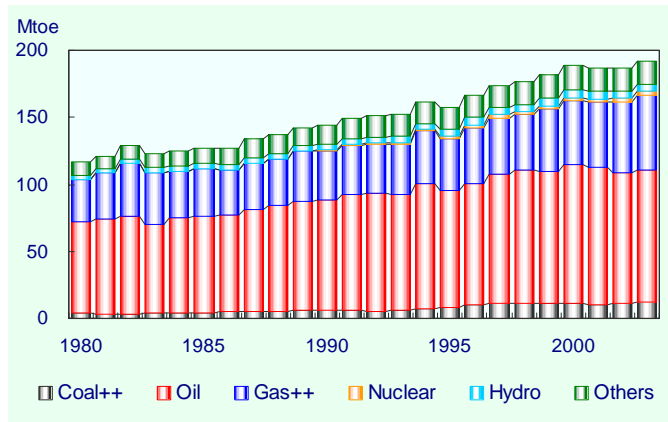
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Total Primary Energy Supply by Energy Latin America



Primary Energy Supply

	Mtoe					
	1980	1990	2000	2001	2002	2003
Coal++	3.9	6.2	10.7	10.5	11.5	12.3
Oil	68.5	81.8	104.4	102.2	97.5	98.3
Gas++	31.5	37.3	47.7	48.9	52.4	56.0
Nuclear	-	0.8	2.1	2.3	2.5	2.7
Hydro	2.7	3.7	5.9	5.7	5.7	5.2
Others	9.8	14.5	18.4	17.4	17.3	17.5
Total	116.3	144.2	189.2	187.1	187.0	192.1

	Share (%)					
	1980	1990	2000	2001	2002	2003
Coal++	3.3	4.3	5.7	5.6	6.2	6.4
Oil	58.9	56.7	55.2	54.6	52.2	51.2
Gas++	27.1	25.9	25.2	26.2	28.0	29.1
Nuclear	-	0.5	1.1	1.2	1.4	1.4
Hydro	2.3	2.5	3.1	3.1	3.0	2.7
Others	8.4	10.1	9.7	9.3	9.3	9.1

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Primary Energy Supply

Indigenous Production of Coal APEC 19

The chart displays the indigenous production of coal in Mtoe for APEC 19 from 1980 to 2003. The y-axis represents Mtoe, ranging from 0 to 1,800. The x-axis shows years from 1980 to 2003. The bars are stacked by country: China (red), United States (blue), Australia (orange), Indonesia (light blue), Canada (green), Thailand (yellow), and Others (purple). The total production increases from approximately 838.5 Mtoe in 1980 to 1,608.8 Mtoe in 2003.

	Mtoe					
	1980	1990	2000	2001	2002	2003
China	294.6	513.0	474.1	551.4	655.5	791.8
United States	445.2	537.6	536.9	566.0	543.9	525.5
Australia	51.9	106.3	159.9	162.2	178.9	179.8
Indonesia	0.2	5.8	44.0	50.3	56.2	62.1
Canada	20.2	37.9	34.2	35.5	33.0	32.9
Thailand	0.4	3.6	5.2	5.7	5.7	5.5
Others	26.0	20.5	12.2	11.9	11.4	11.2
APEC 19	838.5	1,224.6	1,266.6	1,383.0	1,484.6	1,608.8

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	35.1	41.9	37.4	39.9	44.2	49.2
United States	53.1	43.9	42.4	40.9	36.6	32.7
Australia	6.2	8.7	12.6	11.7	12.0	11.2
Indonesia	0.0	0.5	3.5	3.6	3.8	3.9
Canada	2.4	3.1	2.7	2.6	2.2	2.0
Thailand	0.0	0.3	0.4	0.4	0.4	0.3
Others	3.1	1.7	1.0	0.9	0.8	0.7

Coal: Hard Coal, Anthracite and Lignite

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Indigenous Production of Crude Oil APEC 19

Primary Energy Supply

	Mtoe					
	1980	1990	2000	2001	2002	2003
United States	490.8	424.8	307.7	305.9	302.7	295.5
Mexico	102.8	138.6	161.2	166.0	165.3	176.3
China	100.7	131.5	154.9	155.8	158.7	161.1
Canada	85.3	99.7	136.4	138.3	141.1	153.3
Indonesia	76.7	70.7	69.0	62.0	57.7	53.0
Malaysia	13.7	30.6	33.8	32.9	34.8	37.0
Others	44.9	51.3	56.9	55.8	57.0	55.8
APEC 19	914.9	947.3	919.9	916.5	917.3	932.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
United States	53.7	44.8	33.5	33.4	33.0	31.7
Mexico	11.2	14.6	17.5	18.1	18.0	18.9
China	11.0	13.9	16.8	17.0	17.3	17.3
Canada	9.3	10.5	14.8	15.1	15.4	16.4
Indonesia	8.4	7.5	7.5	6.8	6.3	5.7
Malaysia	1.5	3.2	3.7	3.6	3.8	4.0
Others	4.9	5.4	6.2	6.1	6.2	6.0

Crude Oil includes NGL and condensate

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Primary Energy Supply

Indigenous Production of Natural Gas APEC 19

The chart displays the indigenous production of natural gas in Mtoe for APEC 19 from 1980 to 2003. The y-axis represents Mtoe, ranging from 0 to 900. The x-axis shows years from 1980 to 2003. The bars are stacked by country: United States (red), Canada (blue), Mexico (green), Malaysia (cyan), China (yellow), Indonesia (orange), and Others (purple). The total production increases from approximately 600 Mtoe in 1980 to 856.7 Mtoe in 2003.

	Mtoe					
	1980	1990	2000	2001	2002	2003
United States	451.5	416.4	445.9	457.4	442.8	446.6
Canada	63.6	88.2	148.9	152.5	153.6	150.6
Indonesia	14.8	41.0	65.8	50.2	55.2	63.6
Malaysia	2.2	15.5	44.8	43.5	45.0	46.1
Mexico	35.1	35.3	43.1	41.8	41.0	42.1
China	12.0	12.8	22.8	25.4	27.4	29.3
Others	23.7	39.9	66.8	75.0	80.7	78.3
APEC 19	603.0	649.2	838.2	845.6	845.7	856.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
United States	74.9	64.2	53.2	54.1	52.4	52.1
Canada	10.6	13.6	17.8	18.0	18.2	17.6
Indonesia	2.5	6.3	7.9	5.9	6.5	7.4
Malaysia	0.4	2.4	5.3	5.1	5.3	5.4
Mexico	5.8	5.4	5.1	4.9	4.9	4.9
China	2.0	2.0	2.7	3.0	3.2	3.4
Others	3.9	6.2	8.0	8.9	9.5	9.1

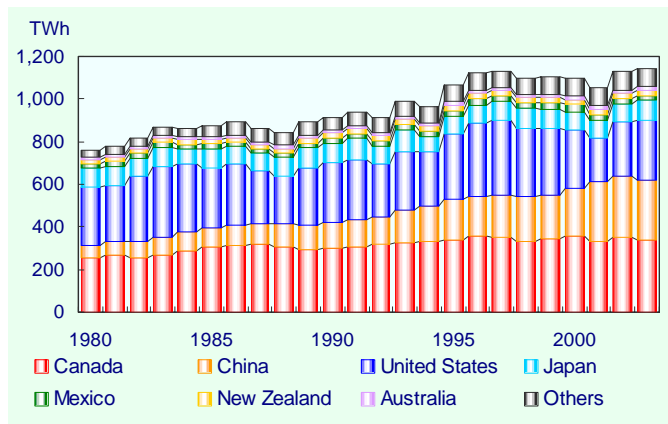
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Indigenous Production of Hydro Power APEC 19



	TWh					
	1980	1990	2000	2001	2002	2003
Canada	253.2	296.8	358.4	333.1	350.4	337.5
China	59.2	126.7	222.4	277.4	288.0	283.7
United States	276.0	279.9	273.1	208.1	255.6	278.6
Japan	91.0	91.0	87.0	81.9	82.7	96.8
Mexico	16.7	23.3	33.3	28.0	24.9	19.8
New Zealand	19.2	23.0	24.6	21.6	25.2	23.7
Australia	13.8	14.9	16.4	16.8	16.4	16.4
Others	29.5	60.1	81.5	84.7	83.6	85.2
APEC 19	758.7	915.7	1,096.7	1,051.7	1,126.7	1,141.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
Canada	33.4	32.4	32.7	31.7	31.1	29.6
China	7.8	13.8	20.3	26.4	25.6	24.8
United States	36.4	30.6	24.9	19.8	22.7	24.4
Japan	12.0	9.9	7.9	7.8	7.3	8.5
Mexico	2.2	2.5	3.0	2.7	2.2	1.7
New Zealand	2.5	2.5	2.2	2.1	2.2	2.1
Australia	1.8	1.6	1.5	1.6	1.5	1.4
Others	3.9	6.6	7.4	8.0	7.4	7.5

Primary Energy Supply

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Primary Energy Supply

Indigenous Production of Nuclear Power APEC 19

The chart displays the indigenous production of nuclear power in TWh for APEC 19 countries from 1980 to 2003. The total production grows from approximately 380 TWh in 1980 to over 1,300 TWh by 2003. The United States and Japan are the largest contributors throughout the period.

	TWh					
	1980	1990	2000	2001	2002	2003
United States	251.1	576.9	753.9	768.8	780.1	787.8
Japan	82.6	195.8	319.8	306.8	300.9	230.4
Korea	3.5	52.9	109.0	112.1	119.1	129.7
Canada	35.9	68.8	72.8	76.7	75.5	74.9
Chinese Taipei	8.2	32.9	38.5	35.5	39.6	38.9
China	-	-	16.7	17.5	25.1	43.3
Mexico	-	2.9	8.2	8.8	9.7	10.5
Others	-	-	-	-	-	-
APEC 19	381.3	930.2	1,318.8	1,326.3	1,350.1	1,315.5

	Share (%)					
	1980	1990	2000	2001	2002	2003
United States	65.9	62.0	57.2	58.0	57.8	59.9
Japan	21.7	21.0	24.2	23.1	22.3	17.5
Korea	0.9	5.7	8.3	8.5	8.8	9.9
Canada	9.4	7.4	5.5	5.8	5.6	5.7
Chinese Taipei	2.2	3.5	2.9	2.7	2.9	3.0
China	-	-	1.3	1.3	1.9	3.3
Mexico	-	0.3	0.6	0.7	0.7	0.8
Others	-	-	-	-	-	-

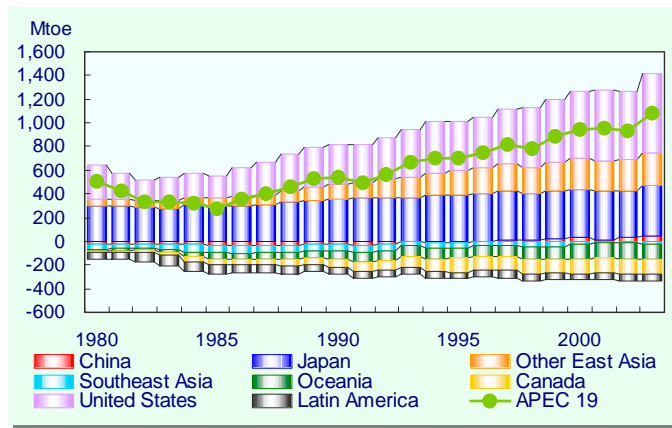
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Net Import by Region APEC 19



Primary Energy Supply

	Mtoe					
	1980	1990	2000	2001	2002	2003
Australia	-18.3	-65.3	-119.6	-126.7	-131.0	-131.0
Brunei Darussalam	-17.4	-12.9	-14.8	-15.1	-17.5	-18.0
Canada	-11.0	-68.4	-124.1	-124.0	-136.6	-127.4
Chile	4.1	7.0	16.2	15.2	16.0	16.4
China	-18.6	-29.0	34.5	13.5	30.2	48.3
Hong Kong, China	6.0	10.8	18.2	19.3	20.0	20.6
Indonesia	-60.7	-65.9	-82.4	-74.2	-74.8	-81.4
Japan	303.2	361.6	406.8	406.5	396.0	421.6
Korea	29.6	69.5	162.7	163.5	168.4	175.9
Malaysia	-5.0	-25.4	-27.4	-26.1	-27.2	-26.2
Mexico	-51.0	-65.7	-71.6	-72.9	-71.3	-81.5
New Zealand	4.0	2.2	3.5	3.5	3.8	4.5
Papua New Guinea	0.6	-3.7	-2.7	-2.0	-1.4	-1.1
Peru	-3.0	-0.6	3.3	2.6	2.9	3.2
Philippines	10.4	11.4	20.0	20.2	18.3	17.7
Singapore	6.7	22.9	40.2	43.6	44.6	44.4
Chinese Taipei	20.3	39.4	76.4	77.7	79.6	83.0
Thailand	12.0	18.2	34.6	37.8	39.6	43.8
United States	288.6	334.8	568.6	591.6	576.1	663.0
APEC 19	500.6	540.9	942.5	954.2	935.6	1,075.9

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Transformation

Refining of Petroleum Products by Fuel APEC 19

	1980	1990	2000	2001	2002	2003
Mogas	406.0	457.8	566.3	566.4	579.8	596.9
Naphtha	38.3	33.9	60.7	59.8	63.5	59.6
Jet Fuel	65.5	99.4	125.5	122.5	120.4	118.7
Kerosene	46.9	41.9	61.7	59.2	55.9	58.8
Diesel Oil	248.0	300.2	441.7	450.0	443.9	468.5
Fuel Oil	303.0	238.0	240.2	229.0	216.0	231.4
LPG	22.6	33.1	51.3	45.0	45.5	47.8
Others	167.4	188.0	235.5	235.9	236.4	249.0
Total	1,297.6	1,392.3	1,782.9	1,767.7	1,761.4	1,830.8

	1980	1990	2000	2001	2002	2003
Mogas	31.3	32.9	31.8	32.0	32.9	32.6
Naphtha	2.9	2.4	3.4	3.4	3.6	3.3
Jet Fuel	5.0	7.1	7.0	6.9	6.8	6.5
Kerosene	3.6	3.0	3.5	3.3	3.2	3.2
Diesel Oil	19.1	21.6	24.8	25.5	25.2	25.6
Fuel Oil	23.3	17.1	13.5	13.0	12.3	12.6
LPG	1.7	2.4	2.9	2.5	2.6	2.6
Others	12.9	13.5	13.2	13.3	13.4	13.6

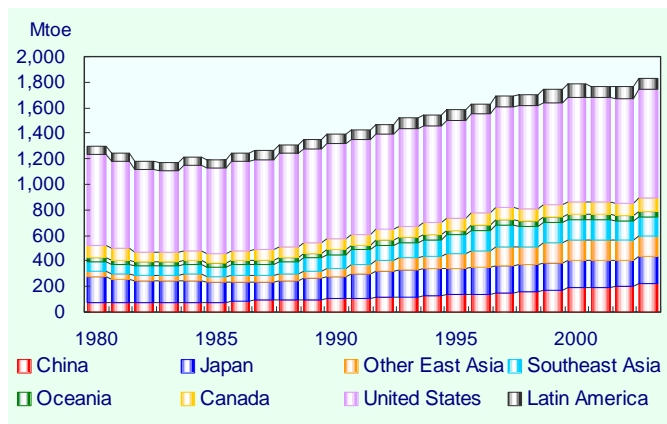
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Refining of Petroleum Products by Region APEC 19



	Mtoe					
	1980	1990	2000	2001	2002	2003
China	74.0	102.0	188.2	190.2	198.8	219.8
Japan	203.9	178.5	215.6	213.0	207.6	213.6
Other East Asia	40.6	60.9	162.0	160.6	154.0	157.2
Southeast Asia	74.3	109.6	155.3	155.9	148.9	150.3
Oceania	33.4	36.7	44.0	42.0	41.8	42.8
Canada	95.3	88.2	98.1	101.0	104.2	107.8
United States	714.9	738.6	821.3	821.7	819.2	849.8
Latin America	61.2	77.7	98.5	83.2	87.0	89.4
APEC 19	1,297.6	1,392.3	1,782.9	1,767.7	1,761.4	1,830.8

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	5.7	7.3	10.6	10.8	11.3	12.0
Japan	15.7	12.8	12.1	12.0	11.8	11.7
Other East Asia	3.1	4.4	9.1	9.1	8.7	8.6
Southeast Asia	5.7	7.9	8.7	8.8	8.5	8.2
Oceania	2.6	2.6	2.5	2.4	2.4	2.3
Canada	7.3	6.3	5.5	5.7	5.9	5.9
United States	55.1	53.0	46.1	46.5	46.5	46.4
Latin America	4.7	5.6	5.5	4.7	4.9	4.9

Transformation

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Transformation

Electricity Power Generation by Type APEC 19

The chart illustrates the growth of electricity power generation in APEC 19 from 1980 to 2003. The total generation increases from approximately 3,885 TWh in 1980 to over 9,100 TWh in 2003. Thermal power remains the dominant source, while Hydro and Nuclear power show significant growth. Geothermal and Other sources remain relatively small but show a slight upward trend.

	TWh					
	1980	1990	2000	2001	2002	2003
Thermal	2,727.8	3,558.5	5,628.5	5,753.7	6,010.2	6,561.2
Hydro	758.7	915.7	1,096.7	1,051.7	1,126.7	1,141.7
Nuclear	381.3	930.2	1,318.8	1,326.3	1,350.1	1,315.5
Geothermal	10.4	24.0	42.9	42.0	41.5	43.1
Others	6.8	17.2	92.6	99.7	103.7	106.5
Total	3,884.9	5,445.6	8,179.6	8,273.4	8,632.1	9,168.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
Thermal	70.2	65.3	68.8	69.5	69.6	71.6
Hydro	19.5	16.8	13.4	12.7	13.1	12.5
Nuclear	9.8	17.1	16.1	16.0	15.6	14.3
Geothermal	0.3	0.4	0.5	0.5	0.5	0.5
Others	0.2	0.3	1.1	1.2	1.2	1.2

"Others" comprises power generated from renewable energy.

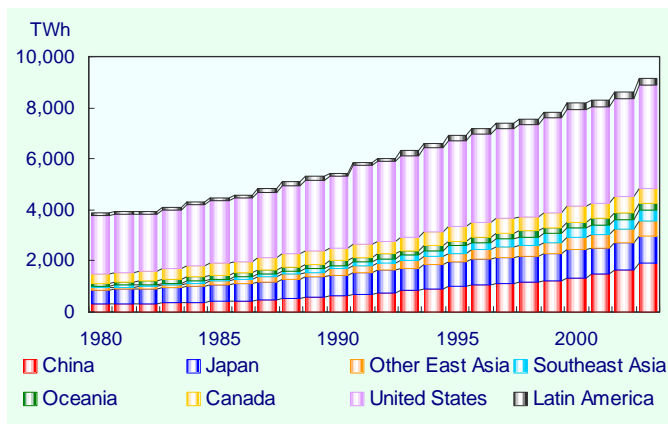
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Electricity Power Generation by Region APEC 19



	TWh					
	1980	1990	2000	2001	2002	2003
China	301.6	621.2	1,355.6	1,471.7	1,640.5	1,907.4
Japan	566.0	833.6	1,072.5	1,049.8	1,052.2	1,075.3
Other East Asia	92.5	223.6	482.6	506.2	539.6	567.0
Southeast Asia	59.6	147.6	366.7	386.5	406.9	428.0
Oceania	120.0	187.7	244.5	252.6	266.5	273.4
Canada	375.0	477.9	605.2	587.7	600.4	587.0
United States	2,286.4	2,808.2	3,800.4	3,758.4	3,859.0	4,054.4
Latin America	83.7	145.8	252.0	260.5	266.9	275.4
APEC 19	3,884.9	5,445.6	8,179.6	8,273.4	8,632.1	9,168.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	7.8	11.4	16.6	17.8	19.0	20.8
Japan	14.6	15.3	13.1	12.7	12.2	11.7
Other East Asia	2.4	4.1	5.9	6.1	6.3	6.2
Southeast Asia	1.5	2.7	4.5	4.7	4.7	4.7
Oceania	3.1	3.4	3.0	3.1	3.1	3.0
Canada	9.7	8.8	7.4	7.1	7.0	6.4
United States	58.9	51.6	46.5	45.4	44.7	44.2
Latin America	2.2	2.7	3.1	3.1	3.1	3.0

Transformation

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Transformation

Power Generation Capacity by Type APEC 19

	GW					
	1980	1990	2000	2001	2002	2003
Thermal	676.2	860.1	1,222.6	1,290.4	1,380.8	1,452.1
Hydro	204.9	259.8	334.9	339.3	341.1	348.3
Nuclear	75.2	157.8	181.3	182.2	186.3	188.8
Others	1.9	5.2	21.7	22.5	24.2	25.4
Total	958.2	1,282.8	1,760.5	1,834.4	1,932.4	2,014.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
Thermal	70.6	67.0	69.4	70.3	71.5	72.1
Hydro	21.4	20.3	19.0	18.5	17.7	17.3
Nuclear	7.9	12.3	10.3	9.9	9.6	9.4
Others	0.2	0.4	1.2	1.2	1.3	1.3

"Others" comprises power generated from renewable energy.

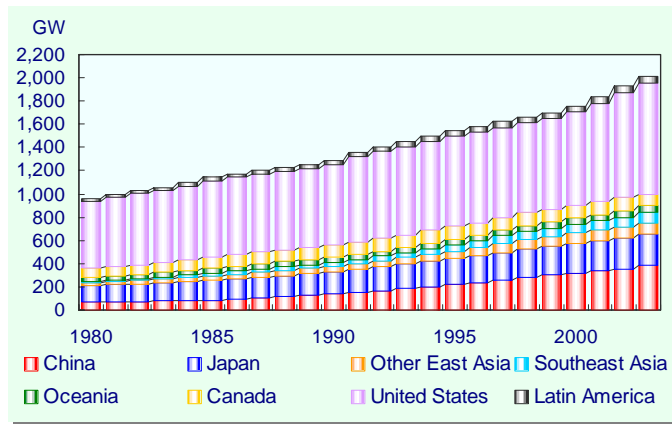
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Power Generation Capacity by Region APEC 19



	GW					
	1980	1990	2000	2001	2002	2003
China	65.9	137.9	319.3	338.0	353.0	382.1
Japan	143.7	194.7	258.8	261.7	266.1	268.3
Other East Asia	21.8	46.2	87.4	89.9	97.3	101.1
Southeast Asia	15.0	34.5	75.9	80.9	84.5	90.5
Oceania	30.6	42.6	51.7	53.1	55.6	54.6
Canada	82.0	102.9	102.5	107.2	111.9	102.8
United States	578.6	690.5	811.7	848.3	905.3	953.2
Latin America	20.7	33.5	53.1	55.3	58.5	62.0
APEC 19	958.2	1,282.8	1,760.5	1,834.4	1,932.4	2,014.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	6.9	10.7	18.1	18.4	18.3	19.0
Japan	15.0	15.2	14.7	14.3	13.8	13.3
Other East Asia	2.3	3.6	5.0	4.9	5.0	5.0
Southeast Asia	1.6	2.7	4.3	4.4	4.4	4.5
Oceania	3.2	3.3	2.9	2.9	2.9	2.7
Canada	8.6	8.0	5.8	5.8	5.8	5.1
United States	60.4	53.8	46.1	46.2	46.8	47.3
Latin America	2.2	2.6	3.0	3.0	3.0	3.1

Transformation

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Final Energy Consumption

Total Final Energy Consumption by Region APEC 19

	Mtoe					
	1980	1990	2000	2001	2002	2003
China	301.4	469.3	522.8	536.8	634.6	690.3
Japan	252.7	305.1	360.0	352.5	353.9	357.2
Other East Asia	56.1	108.4	208.2	216.2	226.2	229.5
Southeast Asia	48.1	85.3	161.9	171.7	179.0	181.8
Oceania	59.3	74.0	93.9	90.5	92.5	94.4
Canada	156.7	164.6	191.6	185.2	194.3	199.7
United States	1,434.3	1,475.2	1,607.8	1,561.7	1,578.8	1,574.1
Latin America	79.6	101.7	125.2	123.0	124.9	125.6
APEC 19	2,388.1	2,783.6	3,271.4	3,237.5	3,384.2	3,452.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
China	12.6	16.9	16.0	16.6	18.8	20.0
Japan	10.6	11.0	11.0	10.9	10.5	10.3
Other East Asia	2.4	3.9	6.4	6.7	6.7	6.6
Southeast Asia	2.0	3.1	4.9	5.3	5.3	5.3
Oceania	2.5	2.7	2.9	2.8	2.7	2.7
Canada	6.6	5.9	5.9	5.7	5.7	5.8
United States	60.1	53.0	49.1	48.2	46.7	45.6
Latin America	3.3	3.7	3.8	3.8	3.7	3.6

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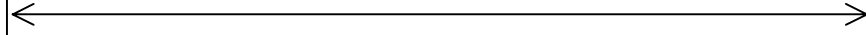
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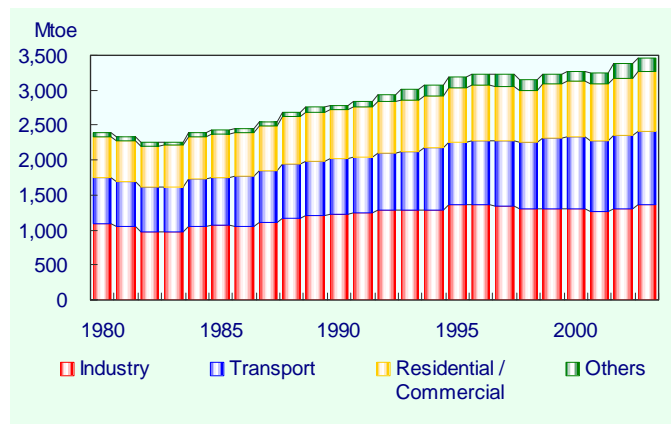
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Total Final Energy Consumption by Sector APEC 19



	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	1,085.4	1,227.5	1,299.8	1,255.5	1,308.1	1,355.6
Transport	656.2	799.8	1,024.2	1,028.4	1,041.4	1,055.7
Residential / Commercial	585.1	688.2	801.7	800.8	823.4	853.2
Others	61.4	68.1	145.7	152.7	211.3	188.2
Total	2,388.1	2,783.6	3,271.4	3,237.5	3,384.2	3,452.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	45.5	44.1	39.7	38.8	38.7	39.3
Transport	27.5	28.7	31.3	31.8	30.8	30.6
Residential / Commercial	24.5	24.7	24.5	24.7	24.3	24.7
Others	2.6	2.4	4.5	4.7	6.2	5.5

Final Energy Consumption

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Final Energy Consumption

Total Final Energy Consumption by Sector China

The chart illustrates the growth of total final energy consumption in China from 1980 to 2003. The total consumption increases from approximately 300 Mtoe in 1980 to nearly 700 Mtoe in 2003. The Industrial sector (red) is the largest consumer throughout the period, followed by Residential/Commercial (yellow) and Others (green). Transport (blue) shows a steady increase in its share of total consumption.

	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	205.7	316.8	290.4	294.1	323.7	400.1
Transport	14.2	27.3	59.2	61.0	66.0	76.4
Residential / Commercial	71.9	112.1	88.3	91.7	99.1	109.6
Others	9.6	13.1	84.9	90.0	145.8	104.2
Total	301.4	469.3	522.8	536.8	634.6	690.3

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	68.2	67.5	55.5	54.8	51.0	58.0
Transport	4.7	5.8	11.3	11.4	10.4	11.1
Residential / Commercial	23.8	23.9	16.9	17.1	15.6	15.9
Others	3.2	2.8	16.2	16.8	23.0	15.1

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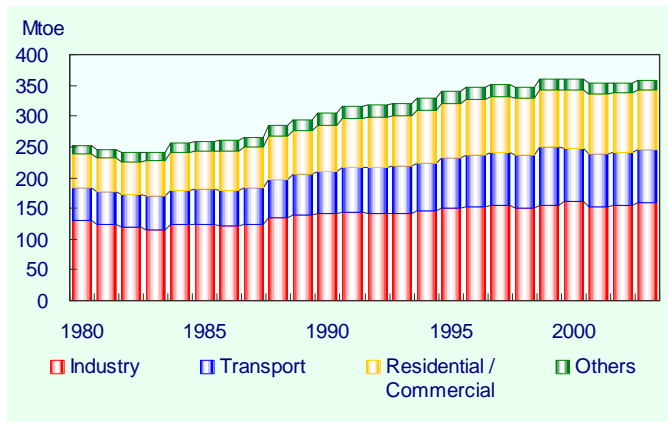
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Total Final Energy Consumption by Sector Japan



	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	131.4	140.8	160.7	152.2	154.9	158.4
Transport	52.3	70.1	86.9	86.6	86.4	86.3
Residential / Commercial	54.2	74.7	95.5	96.9	96.6	97.3
Others	14.8	19.6	16.8	16.8	16.0	15.2
Total	252.7	305.1	360.0	352.5	353.9	357.2

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	52.0	46.1	44.7	43.2	43.8	44.3
Transport	20.7	23.0	24.1	24.6	24.4	24.2
Residential / Commercial	21.5	24.5	26.5	27.5	27.3	27.2
Others	5.8	6.4	4.7	4.8	4.5	4.3

Final Energy Consumption

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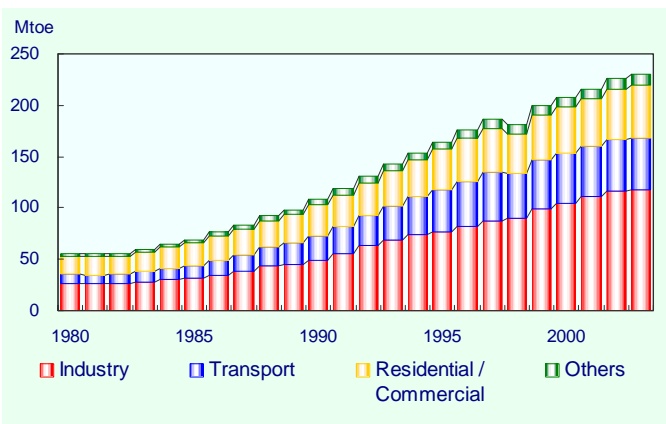
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Final Energy Consumption

Total Final Energy Consumption by Sector Other East Asia



	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	26.5	49.2	105.0	111.0	116.1	117.1
Transport	9.5	23.9	48.0	48.6	50.9	51.4
Residential / Commercial	16.4	29.8	45.4	46.6	48.5	50.5
Others	3.7	5.5	9.9	10.0	10.7	10.5
Total	56.1	108.4	208.2	216.2	226.2	229.5

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	47.2	45.4	50.4	51.4	51.3	51.0
Transport	16.9	22.0	23.0	22.5	22.5	22.4
Residential / Commercial	29.2	27.5	21.8	21.6	21.5	22.0
Others	6.6	5.1	4.8	4.6	4.7	4.6

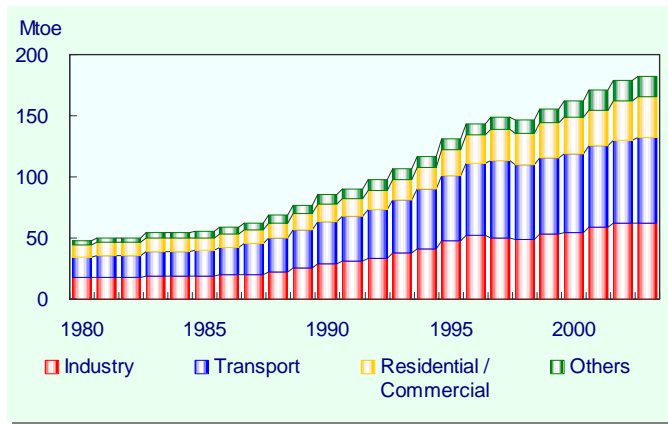
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Total Final Energy Consumption by Sector Southeast Asia



	1980	1990	2000	2001	2002	Mtoe 2003
Industry	17.4	28.7	53.9	59.1	61.7	62.2
Transport	16.7	34.5	65.0	66.7	68.3	69.7
Residential / Commercial	10.4	14.4	30.5	29.2	32.5	33.3
Others	3.5	7.8	12.5	16.7	16.5	16.5
Total	48.1	85.3	161.9	171.7	179.0	181.8

	1980	1990	2000	2001	2002	Share (%) 2003
Industry	36.3	33.7	33.3	34.4	34.5	34.2
Transport	34.8	40.4	40.2	38.8	38.2	38.3
Residential / Commercial	21.7	16.8	18.8	17.0	18.1	18.3
Others	7.3	9.1	7.7	9.7	9.2	9.1

Final Energy Consumption

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Final Energy Consumption

Total Final Energy Consumption by Sector Oceania

The chart illustrates the growth of total final energy consumption in Oceania from 1980 to 2003. The total consumption increases from approximately 59.3 Mtoe in 1980 to 94.4 Mtoe in 2003. The Industrial sector (red) remains the largest consumer, followed by Transport (blue). Residential and Commercial sectors (yellow) show a steady increase, while the 'Others' category (green) also grows significantly over the period.

	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	25.9	31.2	37.4	35.7	35.2	28.6
Transport	20.0	25.7	33.9	32.8	32.2	34.2
Residential / Commercial	10.5	13.1	16.7	16.6	16.9	18.1
Others	2.9	4.0	6.0	5.5	8.2	13.5
Total	59.3	74.0	93.9	90.5	92.5	94.4

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	43.6	42.1	39.8	39.4	38.1	30.3
Transport	33.8	34.8	36.1	36.2	34.8	36.2
Residential / Commercial	17.7	17.7	17.8	18.4	18.2	19.1
Others	4.9	5.4	6.4	6.0	8.9	14.3

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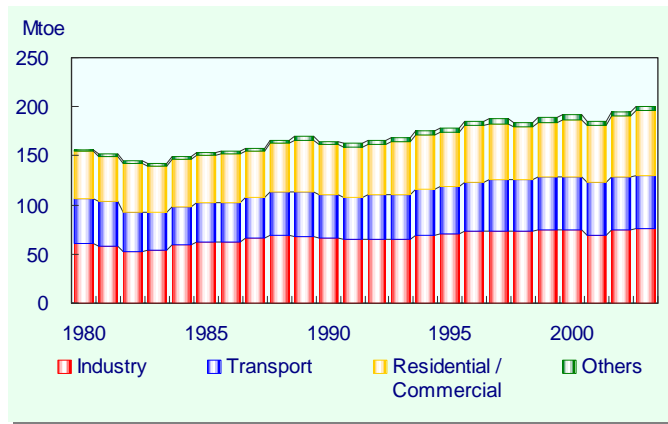
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Total Final Energy Consumption by Sector Canada



	1980	1990	2000	2001	2002	Mtoe 2003
Industry	61.1	65.6	74.1	69.5	74.7	76.2
Transport	45.0	44.2	53.8	53.1	53.8	54.4
Residential / Commercial	48.2	51.3	59.2	58.7	62.1	65.3
Others	2.4	3.5	4.5	4.0	3.7	3.9
Total	156.7	164.6	191.6	185.2	194.3	199.7

	1980	1990	2000	2001	2002	Share (%) 2003
Industry	39.0	39.9	38.7	37.5	38.4	38.1
Transport	28.7	26.9	28.1	28.6	27.7	27.2
Residential / Commercial	30.7	31.2	30.9	31.7	32.0	32.7
Others	1.6	2.1	2.3	2.2	1.9	2.0

Final Energy Consumption

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Final Energy Consumption

Total Final Energy Consumption by Sector United States of America

The chart illustrates the growth of total final energy consumption in the US from 1980 to 2003. The total consumption increases from approximately 1,434 Mtoe in 1980 to 1,574 Mtoe in 2003. The Industrial sector (red) shows a steady decline from 594.2 Mtoe in 1980 to 476.1 Mtoe in 2003. The Transport sector (blue) shows a significant increase from 470.3 Mtoe in 1980 to 633.3 Mtoe in 2003. Residential and Commercial sectors (yellow) also show growth, increasing from 356.9 Mtoe in 1980 to 451.3 Mtoe in 2003. The 'Others' category (green) remains a small fraction of the total, growing from 12.9 Mtoe in 1980 to 13.4 Mtoe in 2003.

	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	594.2	563.7	539.5	496.0	503.3	476.1
Transport	470.3	537.7	628.8	631.7	635.2	633.3
Residential / Commercial	356.9	371.4	439.5	434.0	440.2	451.3
Others	12.9	2.4	0.1	0.1	0.1	13.4
Total	1,434.3	1,475.2	1,607.8	1,561.7	1,578.8	1,574.1

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	41.4	38.2	33.6	31.8	31.9	30.2
Transport	32.8	36.5	39.1	40.4	40.2	40.2
Residential / Commercial	24.9	25.2	27.3	27.8	27.9	28.7
Others	0.9	0.2	0.0	0.0	0.0	0.9

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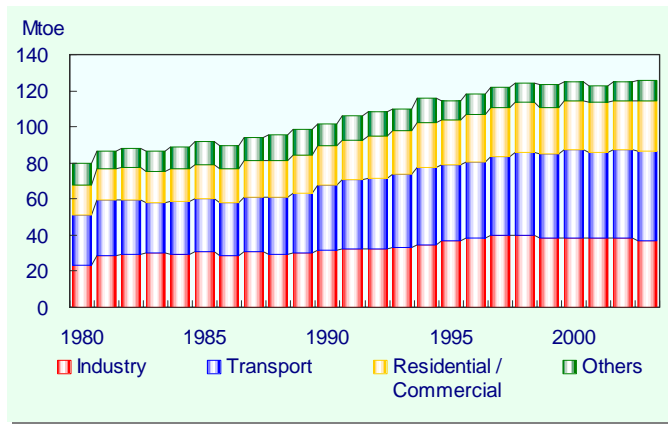
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Total Final Energy Consumption by Sector Latin America



	1980	1990	2000	2001	2002	2003
						Mtoe
Industry	23.3	31.4	38.7	38.0	38.4	36.8
Transport	28.1	36.4	48.6	48.1	48.6	50.0
Residential / Commercial	16.6	21.5	26.8	27.2	27.5	27.8
Others	11.6	12.4	11.1	9.7	10.4	11.0
Total	79.6	101.7	125.2	123.0	124.9	125.6
						Share (%)
Industry	29.3	30.9	30.9	30.9	30.8	29.3
Transport	35.3	35.8	38.8	39.1	38.9	39.8
Residential / Commercial	20.9	21.1	21.4	22.1	22.0	22.1
Others	14.5	12.2	8.9	7.9	8.3	8.7

Final Energy Consumption

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Final Energy Consumption

Coal++ Demand by Sector APEC 19

	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	295.9	371.9	332.3	323.5	334.3	362.3
Transport	9.6	10.6	4.8	4.5	4.7	5.2
Residential / Commercial	79.2	110.5	44.9	44.8	48.7	50.7
Others	9.6	0.9	18.6	20.1	45.3	24.5
Total	394.3	493.9	400.6	392.9	433.0	442.7

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	75.0	75.3	82.9	82.3	77.2	81.8
Transport	2.4	2.1	1.2	1.1	1.1	1.2
Residential / Commercial	20.1	22.4	11.2	11.4	11.2	11.4
Others	2.4	0.2	4.6	5.1	10.5	5.5

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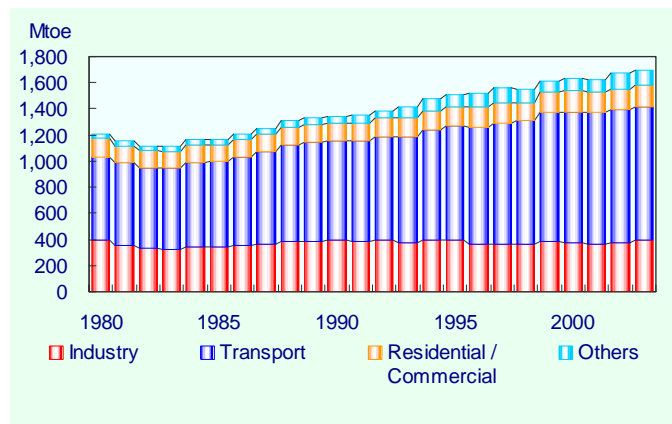
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Oil Demand by Sector APEC 19



	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	399.2	392.1	373.8	363.4	373.8	394.1
Transport	628.0	767.2	1,000.2	1,005.2	1,017.4	1,023.0
Residential / Commercial	144.0	132.7	162.6	160.4	160.7	162.7
Others	40.8	53.4	94.6	97.7	125.8	117.3
Total	1,211.9	1,345.3	1,631.1	1,626.7	1,677.8	1,697.1

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	32.9	29.1	22.9	22.3	22.3	23.2
Transport	51.8	57.0	61.3	61.8	60.6	60.3
Residential / Commercial	11.9	9.9	10.0	9.9	9.6	9.6
Others	3.4	4.0	5.8	6.0	7.5	6.9

Final Energy Consumption

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Final Energy Consumption

Gas++ Demand by Sector APEC 19

The chart displays the demand for gas in APEC 19 from 1980 to 2003. The total demand shows a steady increase over the period, with a notable rise starting around 1995. The Residential / Commercial sector is the largest consumer, followed by Industry. Transport and Others represent smaller shares of the total demand.

	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	235.5	251.8	306.5	282.8	289.5	266.6
Transport	16.4	18.4	13.7	12.9	13.3	20.6
Residential / Commercial	197.1	201.0	248.2	240.6	246.1	258.5
Others	6.4	6.9	12.0	13.4	17.1	22.4
Total	455.4	478.1	580.3	549.7	566.2	568.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	51.7	52.7	52.8	51.4	51.1	46.9
Transport	3.6	3.9	2.4	2.3	2.4	3.6
Residential / Commercial	43.3	42.0	42.8	43.8	43.5	45.5
Others	1.4	1.4	2.1	2.4	3.0	3.9

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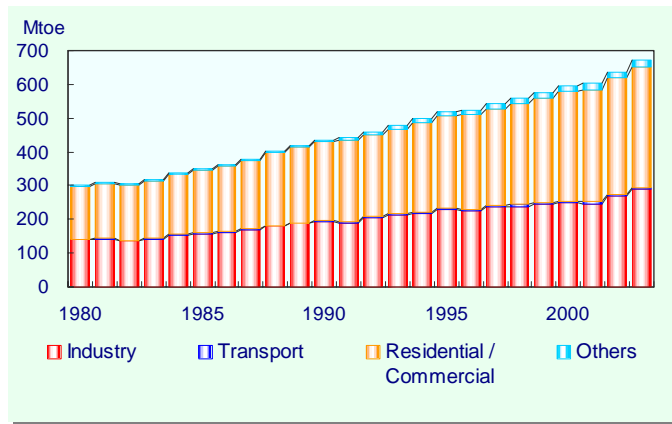
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Electricity Demand by Sector APEC 19



	Mtoe					
	1980	1990	2000	2001	2002	2003
Industry	140.4	193.8	248.4	246.0	267.5	288.7
Transport	2.2	3.6	5.4	5.7	5.8	6.7
Residential / Commercial	153.8	231.3	324.4	333.3	345.3	356.0
Others	3.9	6.4	16.7	18.0	18.9	20.7
Total	300.3	435.2	594.8	603.0	637.5	672.0

	Share (%)					
	1980	1990	2000	2001	2002	2003
Industry	46.8	44.5	41.8	40.8	42.0	43.0
Transport	0.7	0.8	0.9	0.9	0.9	1.0
Residential / Commercial	51.2	53.2	54.5	55.3	54.2	53.0
Others	1.3	1.5	2.8	3.0	3.0	3.1

Final Energy Consumption

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APEC 21, 2003

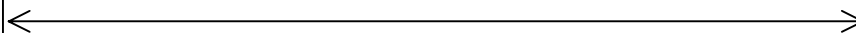
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,726,449	-	1,370,609	59,273	1,359,299
2 Import	249,658	2,312	1,231,420	331,086	232,964
3 Export	-292,474	-13,916	-519,240	-290,459	-319,708
4 International Marine Bunkers	-	-	-	-55,598	-
5 Stock Change	10,825	-3	-5,762	-1,104	-15,272
6 Total Primary Energy Supply	1,694,459	-11,607	2,077,027	43,198	1,257,284
7 Public Electricity	-1,139,895	-6,217	-6,988	-105,339	-378,629
8 Autoproducers of Electricity	-33,434	-7,445	-918	-27,077	-100,544
9 Gas Processing	-6,224	17,912	-2,994	14,644	-72,180
10 Petroleum Refineries	-	-	-2,040,506	2,010,982	-1,748
11 Coal Transformation	-221,188	213,474	-	-560	-148
12 Loss & Own Use	-36,529	-4,628	-10,993	-139,748	-73,485
13 Discrepancy	38,624	-7,427	-10,720	-30,466	10,790
14 Total Final Energy Consumption	295,813	194,063	3,909	1,765,635	641,340
15 Industry Sector	224,287	179,081	1,027	405,210	271,913
16 Transport Sector	5,362	77	143	1,069,519	51,613
17 Other Sector	60,534	9,333	53	248,604	283,923
17.1 Agriculture	8,612	914	7	58,028	1,099
17.2 Residential & Commercial	47,494	8,226	35	168,974	276,633
17.3 Other	4,428	192	11	21,603	6,191
18 Non-energy	5,624	5,570	2,607	36,286	33,263

Australia, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	179,753	-	27,974	3,752	34,514
2 Import	-	-	23,851	5,024	-
3 Export	-128,350	-152	-17,593	-4,484	-9,285
4 International Marine Bunkers	-	-	-	-928	-
5 Stock Change	-1,790	-68	-195	265	-
6 Total Primary Energy Supply	49,613	-220	34,037	3,629	25,229
7 Public Electricity	-44,692	-523	-	-395	-4,708
8 Autoproducers of Electricity	-1	-20	-	-80	-1,682
9 Gas Processing	-	-	-	-27	-479
10 Petroleum Refineries	-	-	-37,795	37,747	-542
11 Coal Transformation	-3,096	1,625	-	-	-148
12 Loss & Own Use	-	-	-	-2,808	-224
13 Discrepancy	128	-21	3,777	-268	148
14 Total Final Energy Consumption	1,952	840	19	37,798	17,594
15 Industry Sector	1,879	788	-	3,599	7,046
16 Transport Sector	64	-	-	27,781	375
17 Other Sector	9	53	-	5,677	7,758
17.1 Agriculture	-	-	-	2,098	2
17.2 Residential & Commercial	9	53	-	852	4,149
17.3 Other	-	-	-	2,727	3,607
18 Non-energy	-	-	-	742	2,415

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	113,098	381,036	35,705	59,360	-	-	5,104,829
-	-	-	-	-	5,210	-	2,052,651
-	-	-	-	-1,512	-6,490	-	-1,443,798
-	-	-	-	-	-	-	-55,598
-	-	-	-	44	-	-	-11,271
-	113,098	381,036	35,705	57,892	-1,279	-	5,646,813
-	-109,422	-380,946	-33,061	-11,149	826,543	100,044	-1,245,059
-341	-3,675	-90	-208	-10,845	42,098	95,707	-46,773
54,290	-	-	-	-	-15	-	5,433
-	-	-	-	-	-199	-	-31,471
-	-	-	-	-	-437	-	-8,859
-2,410	-	-	-143	-591	-138,754	-27,560	-434,841
-1,105	0	-0	6	1,748	1,458	-116	2,794
50,434	-	-	2,298	37,056	729,415	168,075	3,888,038
22,177	-	-	397	18,979	318,250	73,138	1,514,458
137	-	-	-	-	13,161	204	1,140,216
28,120	-	-	1,902	15,863	389,708	94,733	1,132,773
21	-	-	98	495	5,068	3,427	77,769
28,099	-	-	1,804	15,074	375,551	90,582	1,012,471
-	-	-	-	295	9,090	724	42,533
-	-	-	-	2,196	-	-	85,545

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,414	-	148	9,685	-	-	257,241
-	-	-	-	-	-	-	28,875
-	-	-	-	-	-	-	-159,865
-	-	-	-	-	-	-	-928
-	-	-	-	-	-	-	-1,788
-	1,414	-	148	9,685	-	-	123,536
-	-1,390	-	-60	-4,968	18,527	-	-38,210
-	-24	-	-	-692	1,165	-	-1,334
204	-	-	-	-	-2	-	-304
-	-	-	-	-	-163	-	-753
-	-	-	-	-	-437	-	-2,056
-	-	-	-	-	-1,304	-	-4,336
-	-0	-	-	0	-467	-	3,297
204	-	-	88	4,025	17,319	-	79,840
156	-	-	-	2,456	8,264	-	24,187
-	-	-	-	-	162	-	28,382
48	-	-	88	1,569	8,893	-	24,095
-	-	-	-	-	143	-	2,243
48	-	-	88	1,569	8,750	-	15,518
-	-	-	-	-	-	-	6,334
-	-	-	-	-	-	-	3,157

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Energy Balances

Brunei Darussalam, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	-	-	10,296	-	11,479
2 Import	-	-	-	13	-
3 Export	-	-	-9,637	-0	-8,396
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	13	-1	30
6 Total Primary Energy Supply	-	-	672	12	3,113
7 Public Electricity	-	-	-	-6	-1,073
8 Autoproducers of Electricity	-	-	-	-	-886
9 Gas Processing	-	-	-	14	-681
10 Petroleum Refineries	-	-	-658	583	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-14	-173	-294
13 Discrepancy	-	-	-0	11	-152
14 Total Final Energy Consumption	-	-	-	442	27
15 Industry Sector	-	-	-	40	-
16 Transport Sector	-	-	-	371	-
17 Other Sector	-	-	-	15	27
17.1 Agriculture	-	-	-	0	-
17.2 Residential & Commercial	-	-	-	15	27
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	14	-

Canada, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	32,890	-	153,298	-	150,631
2 Import	14,326	-	47,351	11,386	7,949
3 Export	-17,554	-	-85,775	-21,196	-83,324
4 International Marine Bunkers	-	-	-	-503	-
5 Stock Change	2,123	-	-1,778	-633	3,939
6 Total Primary Energy Supply	31,784	-	113,095	-10,948	79,195
7 Public Electricity	-27,196	-	-	-3,067	-5,783
8 Autoproducers of Electricity	-	-95	-	-265	-1,470
9 Gas Processing	-	622	-	-	-
10 Petroleum Refineries	-	-	-114,572	107,758	-
11 Coal Transformation	-2,933	2,732	-	-	-
12 Loss & Own Use	-176	-	-	-10,555	-14,129
13 Discrepancy	0	-31	1,477	1,578	-3,604
14 Total Final Energy Consumption	1,479	3,229	-	84,502	54,208
15 Industry Sector	1,191	3,229	-	18,594	24,172
16 Transport Sector	-	-	-	50,154	3,854
17 Other Sector	23	-	-	15,754	26,182
17.1 Agriculture	-	-	-	2,309	485
17.2 Residential & Commercial	23	-	-	13,445	25,696
17.3 Other	-	-	-	-	-
18 Non-energy	265	-	-	-	-

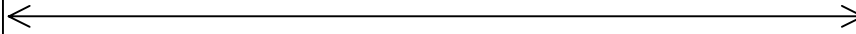
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	21,774
-	-	-	-	-	-	-	13
-	-	-	-	-	-	-	-18,033
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	43
-	-	-	-	-	-	-	3,798
-	-	-	-	-	242	-	-837
-	-	-	-	-	30	-	-855
-	-	-	-	-	-	-	-667
-	-	-	-	-	-	-	-75
-	-	-	-	-	-	-	-
-	-	-	-	-	-39	-	-519
-	-	-	-	-	-0	-	-141
-	-	-	-	-	233	-	703
-	-	-	-	-	54	-	94
-	-	-	-	-	-	-	371
-	-	-	-	-	180	-	222
-	-	-	-	-	-	-	0
-	-	-	-	-	180	-	222
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	14

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	28,736	18,409	17	11,345	-	-	395,326
-	-	-	-	-	2,103	-	83,114
-	-	-	-	-	-2,679	-	-210,528
-	-	-	-	-	-	-	-503
-	-	-	-	-	-	-	3,650
-	28,736	18,409	17	11,345	-576	-	271,059
-	-26,160	-18,409	-10	-	44,759	-	-35,866
-	-2,576	-	-7	-1,255	4,083	861	-724
-	-	-	-	-	-	-	622
-	-	-	-	-	-	-	-6,814
-	-	-	-	-	-	-	-201
-	-	-	-	-	-4,092	-	-28,952
-	-0	-	-	0	1,198	-	618
-	-	-	-	10,090	45,372	861	199,740
-	-	-	-	8,246	19,864	861	76,156
-	-	-	-	-	359	-	54,367
-	-	-	-	1,844	25,149	-	68,952
-	-	-	-	-	861	-	3,655
-	-	-	-	1,844	24,289	-	65,297
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	265

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Chile, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	383	-	181	-	1,829
2 Import	1,931	44	10,324	1,969	5,123
3 Export	-	-	-	-1,652	-
4 International Marine Bunkers	-	-	-	-1,166	-
5 Stock Change	-7	-61	121	86	-241
6 Total Primary Energy Supply	2,307	-18	10,626	-764	6,711
7 Public Electricity	-1,386	-350	-	-31	-2,505
8 Autoproducers of Electricity	-6	-	-	-106	-55
9 Gas Processing	-478	-206	-	-0	-2,364
10 Petroleum Refineries	-	-	-10,626	10,206	-564
11 Coal Transformation	-	673	-	-	-
12 Loss & Own Use	-	-55	-	-656	-
13 Discrepancy	-4	307	-	1,345	58
14 Total Final Energy Consumption	433	351	-	9,995	1,281
15 Industry Sector	369	348	-	1,966	782
16 Transport Sector	-	-	-	6,641	23
17 Other Sector	64	3	-	1,242	475
17.1 Agriculture	63	3	-	139	103
17.2 Residential & Commercial	1	-	-	1,103	373
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	146	-

China, 2003

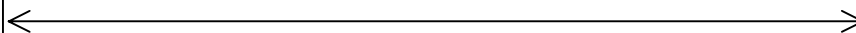
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	791,841	-	161,123	-	29,339
2 Import	5,582	1	86,471	36,663	-
3 Export	-46,386	-9,510	-7,727	-14,557	-1,569
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-2,398	-245	-585	-24	-
6 Total Primary Energy Supply	748,638	-9,753	239,282	22,082	27,770
7 Public Electricity	-405,744	-622	-998	-17,263	-2,282
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-5,746	475	-	-	-
10 Petroleum Refineries	-	-	-227,028	219,768	-
11 Coal Transformation	-130,259	128,818	-	-	-
12 Loss & Own Use	-35,794	-1,671	-8,072	-43,827	-7,590
13 Discrepancy	29,468	-6,254	-2,013	51	6,179
14 Total Final Energy Consumption	200,563	110,992	1,172	180,811	24,076
15 Industry Sector	140,573	97,557	970	32,674	12,993
16 Transport Sector	5,067	73	130	67,401	147
17 Other Sector	49,979	7,793	12	59,648	5,341
17.1 Agriculture	7,996	911	-	16,310	-
17.2 Residential & Commercial	38,194	6,694	1	24,633	5,341
17.3 Other	3,789	188	11	18,705	-
18 Non-energy	4,944	5,570	-	16,946	5,595

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,944	-	-	5,559	-	-	9,896
-	-	-	-	-	168	-	19,558
-	-	-	-	-1,512	-	-	-3,164
-	-	-	-	-	-	-	-1,166
-	-	-	-	-3	-	-	-106
-	1,944	-	-	4,044	168	-	25,018
-	-1,893	-	-	-392	3,906	-	-2,651
-	-51	-	-	-407	289	-	-337
120	-	-	-	-	-12	-	-2,940
-	-	-	-	-	-35	-	-1,019
-	-	-	-	-	-	-	673
-2	-	-	-	-	-336	-	-1,049
2	0	-	-	418	-168	-	1,958
120	-	-	-	3,663	3,811	-	19,653
91	-	-	-	392	2,323	-	6,271
-	-	-	-	-	19	-	6,683
30	-	-	-	3,252	1,469	-	6,535
-	-	-	-	376	338	-	1,022
30	-	-	-	2,877	1,131	-	5,513
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	146

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	24,405	11,295	-	4,629	-	-	1,022,632
-	-	-	-	-	256	-	128,973
-	-	-	-	-	-889	-	-80,639
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-3,252
-	24,405	11,295	-	4,629	-633	-	1,067,714
-	-24,405	-11,295	-	-1,937	164,092	42,322	-258,133
-	-	-	-	-	-	-	-
11,825	-	-	-	-	-	-	6,554
-	-	-	-	-	-	-	-7,259
-	-	-	-	-	-	-	-1,441
-1,009	-	-	-	-325	-36,099	-8,887	-143,273
-1,259	-	-	-	-208	270	-53	26,181
9,557	-	-	-	2,159	127,630	33,382	690,342
7,804	-	-	-	-	83,480	24,033	400,084
6	-	-	-	-	3,415	204	76,442
1,747	-	-	-	-	32,532	9,146	166,197
-	-	-	-	-	67	17	25,300
1,747	-	-	-	-	24,621	8,405	109,635
-	-	-	-	-	7,844	724	31,261
-	-	-	-	2,159	-	-	35,214

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Hong Kong, China, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	-	-	-
2 Import	6,409	-	-	13,461	1,237
3 Export	-9	-	-	-1,107	-
4 International Marine Bunkers	-	-	-	-5,140	-
5 Stock Change	-	-	-	105	-
6 Total Primary Energy Supply	6,401	-	-	7,319	1,237
7 Public Electricity	-6,423	-	-	-47	-1,237
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-669	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	28	-	-	37	-
14 Total Final Energy Consumption	5	-	-	6,639	-
15 Industry Sector	-	-	-	816	-
16 Transport Sector	-	-	-	5,626	-
17 Other Sector	-	-	-	198	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	198	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

Indonesia, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	62,138	-	53,003	-	63,621
2 Import	-	-	17,363	6,721	-
3 Export	-46,586	-	-25,988	-4,978	-27,954
4 International Marine Bunkers	-	-	-	-182	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	15,551	-	44,378	1,561	35,667
7 Public Electricity	-12,503	-	-	-5,485	-4,205
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	1,346	-7,561
10 Petroleum Refineries	-	-	-46,396	43,033	-639
11 Coal Transformation	-14	9	-	-	-
12 Loss & Own Use	-	-	-	-	-16,038
13 Discrepancy	2,146	1	2,018	130	3,412
14 Total Final Energy Consumption	5,180	11	-	40,585	10,637
15 Industry Sector	3,049	-	-	9,698	5,095
16 Transport Sector	-	-	-	20,952	13
17 Other Sector	2,131	9	-	9,631	99
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	2,131	9	-	9,631	99
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	304	4,801

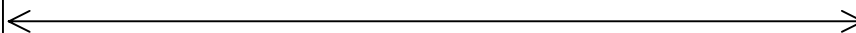
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Unit: ktce

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-
-	-	-	-	-	894	-	22,001
-	-	-	-	-	-259	-	-1,374
-	-	-	-	-	-	-	-5,140
-	-	-	-	-	-	-	105
-	-	-	-	-	635	-	15,592
-	-	-	-	-	3,053	-	-4,654
-	-	-	-	-	-	-	-
580	-	-	-	-	-	-	-89
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-382	-	-382
0	-	-	-	-	-0	-	65
580	-	-	-	-	3,306	-	10,532
22	-	-	-	-	355	-	1,192
-	-	-	-	-	-	-	5,626
559	-	-	-	-	2,952	-	3,708
-	-	-	-	-	-	-	-
559	-	-	-	-	2,943	-	3,699
-	-	-	-	-	9	-	9
-	-	-	-	-	-	-	-

Energy Balances

Unit: ktce

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	783	-	5,413	-	-	-	184,957
-	-	-	-	-	-	-	24,084
-	-	-	-	-	-	-	-105,506
-	-	-	-	-	-	-	-182
-	-	-	-	-	-	-	-
-	783	-	5,413	-	-	-	103,353
-	-783	-	-5,413	-	12,237	-	-16,152
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-6,216
-	-	-	-	-	-	-	-4,003
-	-	-	-	-	-	-	-4
-	-	-	-	-	-1,931	-	-17,969
-	-	-	-	-	175	-	7,883
-	-	-	-	-	10,481	-	66,893
-	-	-	-	-	5,610	-	23,453
-	-	-	-	-	-	-	20,965
-	-	-	-	-	4,871	-	16,740
-	-	-	-	-	-	-	-
-	-	-	-	-	4,227	-	16,096
-	-	-	-	-	644	-	644
-	-	-	-	-	-	-	5,105

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Japan, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	683	-	712	-	2,500
2 Import	101,486	-	215,047	52,636	69,284
3 Export	-	-1,369	-	-15,482	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	43	-	-741	-1,359	-2
6 Total Primary Energy Supply	102,213	-1,369	215,018	35,795	71,782
7 Public Electricity	-42,254	-4,454	-5,990	-13,357	-46,870
8 Autoproducers of Electricity	-5,602	-2,472	-	-11,816	-
9 Gas Processing	-	-784	-	-2,202	-22,444
10 Petroleum Refineries	-	-	-208,571	213,641	-
11 Coal Transformation	-39,952	34,840	-	-560	-
12 Loss & Own Use	-88	-2,806	-1	-12,575	-883
13 Discrepancy	1,736	-1,240	-454	-1,456	-1,035
14 Total Final Energy Consumption	16,053	21,715	1	207,470	549
15 Industry Sector	16,053	20,938	1	73,711	536
16 Transport Sector	-	-	-	84,488	-
17 Other Sector	-	777	-	43,376	13
17.1 Agriculture	-	-	-	8,878	-
17.2 Residential & Commercial	-	777	-	34,498	13
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	5,896	-

Republic of Korea, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,410	-	-	-	-
2 Import	43,599	-	111,993	25,993	22,738
3 Export	-	-	-	-28,379	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	248	-	-738	207	-380
6 Total Primary Energy Supply	45,257	-	111,254	-2,179	22,358
7 Public Electricity	-26,103	-	-	-5,592	-7,567
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-86	-14,014
10 Petroleum Refineries	-	-	-108,951	110,530	-
11 Coal Transformation	-686	686	-	-	-
12 Loss & Own Use	-	-	-	-	-193
13 Discrepancy	2,325	-	-2,303	-11,165	-583
14 Total Final Energy Consumption	20,793	686	-	91,508	-
15 Industry Sector	20,793	-	-	40,564	-
16 Transport Sector	-	-	-	32,572	-
17 Other Sector	-	686	-	15,019	-
17.1 Agriculture	-	-	-	3,083	-
17.2 Residential & Commercial	-	686	-	11,936	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	3,353	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	8,325	60,048	3,807	2,557	-	-	78,632
-	-	-	-	-	-	-	438,453
-	-	-	-	-	-	-	-16,851
-	-	-	-	-	-	-	-2,059
-	8,325	60,048	3,807	2,557	-	-	498,176
-	-7,824	-59,958	-2,778	-200	78,077	-	-105,608
-341	-501	-90	-162	-1,542	14,402	613	-7,513
25,921	-	-	-	-	-	-	491
-	-	-	-	-	-	-	5,070
-	-	-	-	-	-	-	-5,672
-984	-	-	-	-	-9,077	-	-26,414
-340	-0	-0	0	1,533	24	-63	-1,295
24,256	-	-	867	2,348	83,427	550	357,235
9,504	-	-	-	2,311	35,356	-	158,409
-	-	-	-	-	1,842	-	86,329
14,752	-	-	867	37	46,230	550	106,601
-	-	-	98	-	314	-	9,289
14,752	-	-	769	37	45,916	550	97,312
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	5,896

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	592	33,790	-	3,241	-	-	39,033
-	-	-	-	-	-	-	204,323
-	-	-	-	-	-	-	-28,379
-	-	-	-	-	-	-	-664
-	592	33,790	-	3,241	-	-	214,313
-	-592	-33,790	-	-30	27,729	1,345	-44,601
-	-	-	-	-	-	-	-
14,128	-	-	-	-	-	-	28
-	-	-	-	-	-	-	1,579
-	-	-	-	-	-	-	-
-20	-	-	-	-	-2,479	-45	-2,737
-184	-	-	-	-0	0	0	-11,911
13,923	-	-	-	3,210	25,250	1,300	156,671
3,739	-	-	-	2,503	12,422	-	80,020
131	-	-	-	-	200	-	32,904
10,053	-	-	-	708	12,627	1,300	40,394
21	-	-	-	-	511	-	3,615
10,033	-	-	-	708	11,551	1,300	36,214
-	-	-	-	-	564	-	564
-	-	-	-	-	-	-	3,353

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Malaysia, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	107	-	37,026	-	46,123
2 Import	5,268	-	7,921	7,221	1,501
3 Export	-36	-	-18,747	-8,972	-20,367
4 International Marine Bunkers	-	-	-	-72	-
5 Stock Change	378	-	242	434	-
6 Total Primary Energy Supply	5,717	-	26,442	-1,389	27,257
7 Public Electricity	-4,104	-	-	-629	-10,893
8 Autoproducers of Electricity	-	-	-	-170	-469
9 Gas Processing	-	-	-	1,233	-8,975
10 Petroleum Refineries	-	-	-25,449	22,576	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-261	-725
13 Discrepancy	-401	-	-993	-184	-309
14 Total Final Energy Consumption	1,212	-	-	21,176	5,886
15 Industry Sector	1,212	-	-	4,812	4,207
16 Transport Sector	-	-	-	14,226	40
17 Other Sector	-	-	-	1,408	23
17.1 Agriculture	-	-	-	98	-
17.2 Residential & Commercial	-	-	-	1,310	23
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	730	1,616

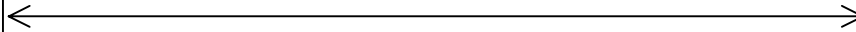
Mexico, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	4,607	-	176,307	-	42,085
2 Import	4,493	324	-	9,354	8,356
3 Export	-0	-1	-95,278	-8,628	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-472	264	546	12	-2,912
6 Total Primary Energy Supply	8,628	587	81,575	738	47,529
7 Public Electricity	-7,356	-	-	-16,899	-14,609
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-3,493	12,734	-7,938
10 Petroleum Refineries	-	-	-77,512	71,099	-
11 Coal Transformation	-1,034	957	-	-	-
12 Loss & Own Use	-	-21	-698	-5,486	-13,008
13 Discrepancy	-58	0	127	-319	-130
14 Total Final Energy Consumption	180	1,523	-	61,867	11,843
15 Industry Sector	180	1,523	-	6,349	9,168
16 Transport Sector	-	-	-	40,106	19
17 Other Sector	-	-	-	10,595	857
17.1 Agriculture	-	-	-	2,062	-
17.2 Residential & Commercial	-	-	-	8,533	857
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	4,796	1,800

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	435	-	-	-	-	-	83,691
-	-	-	-	-	-	-	21,911
-	-	-	-	-	-17	-	-48,139
-	-	-	-	-	-	-	-72
-	-	-	-	-	-	-	1,054
-	435	-	-	-	-17	-	58,445
-	-435	-	-	-	6,569	-	-9,492
-	-	-	-	-	179	-	-460
-	-	-	-	-	-	-	-7,742
-	-	-	-	-	-	-	-2,873
-	-	-	-	-	-	-	-
-	-	-	-	-	-183	-	-1,169
-	0	-	-	-	-235	-	-2,122
-	-	-	-	-	6,313	-	34,587
-	-	-	-	-	3,242	-	13,473
-	-	-	-	-	5	-	14,271
-	-	-	-	-	3,066	-	4,497
-	-	-	-	-	-	-	98
-	-	-	-	-	3,066	-	4,399
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,346

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,698	2,736	5,108	8,268	-	-	240,810
-	-	-	-	-	6	-	22,533
-	-	-	-	-	-82	-	-103,990
-	-	-	-	-	-	-	-
-	-	-	-	-23	-	-	-2,585
-	1,698	2,736	5,108	8,245	-76	-	156,768
-	-1,698	-2,736	-5,108	-	17,518	-	-30,889
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,304
-	-	-	-	-	-	-	-6,412
-	-	-	-	-	-	-	-78
-	-	-	-	-	-3,768	-	-22,981
-	-	-	-	-	116	-	-263
-	-	-	-	8,245	13,791	-	97,449
-	-	-	-	2,075	8,006	-	27,302
-	-	-	-	-	96	-	40,220
-	-	-	-	6,132	5,688	-	23,273
-	-	-	-	-	631	-	2,693
-	-	-	-	6,132	5,057	-	20,579
-	-	-	-	-	-	-	-
-	-	-	-	37	-	-	6,633

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New Zealand, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	3,089	-	1,117	199	3,858
2 Import	271	2	5,335	1,564	-
3 Export	-1,584	-1	-950	-91	-
4 International Marine Bunkers	-	-	-	-250	-
5 Stock Change	-	-	25	-1	0
6 Total Primary Energy Supply	1,776	1	5,528	1,421	3,858
7 Public Electricity	-778	-	-	-	-1,319
8 Autoproducers of Electricity	-21	-	-	-	-612
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-5,441	5,095	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-45	-	-	-136	-141
13 Discrepancy	118	-1	-87	169	73
14 Total Final Energy Consumption	1,049	-	-	6,549	1,859
15 Industry Sector	921	-	-	327	455
16 Transport Sector	2	-	-	5,411	4
17 Other Sector	126	-	-	539	421
17.1 Agriculture	13	-	-	378	-
17.2 Residential & Commercial	114	-	-	162	421
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	272	979

Papua New Guinea, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	2,427	-	132
2 Import	-	-	-	1,340	-
3 Export	-	-	-2,427	-	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	-	-	-	1,340	132
7 Public Electricity	-	-	-	-210	-
8 Autoproducers of Electricity	-	-	-	-291	-132
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-	-	-	0	-0
14 Total Final Energy Consumption	-	-	-	839	-
15 Industry Sector	-	-	-	412	-
16 Transport Sector	-	-	-	374	-
17 Other Sector	-	-	-	41	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	41	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	12	-

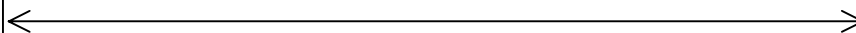
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	2,037	-	2,858	1,215	-	-	14,374
-	-	-	-	-	-	-	7,172
-	-	-	-	-	-	-	-2,626
-	-	-	-	-	-	-	-250
-	-	-	-	-	-	-	25
-	2,037	-	2,858	1,215	-	-	18,694
-	-2,037	-	-2,354	-27	3,250	-	-3,265
-	-	-	-39	-512	295	-	-890
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-346
-	-	-	-	-	-	-	-
-	-	-	-143	-	-247	-	-712
-	-	-	-0	5	-270	-	7
-	-	-	322	681	3,028	-	13,489
-	-	-	269	617	1,237	-	3,826
-	-	-	-	-	46	-	5,463
-	-	-	53	64	1,745	-	2,949
-	-	-	-	-	123	-	513
-	-	-	53	64	1,622	-	2,436
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,250

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	80	-	-	-	-	-	2,640
-	-	-	-	-	-	-	1,340
-	-	-	-	-	-	-	-2,427
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	80	-	-	-	-	-	1,553
-	-47	-	-	-	118	-	-139
-	-33	-	-	-	155	-	-301
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-17	-	-17
-	-	-	-	-	0	-	-0
-	-	-	-	-	256	-	1,095
-	-	-	-	-	189	-	601
-	-	-	-	-	-	-	374
-	-	-	-	-	67	-	108
-	-	-	-	-	-	-	-
-	-	-	-	-	67	-	108
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	12

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Peru, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	11	-	4,615	-	1,720
2 Import	541	126	4,212	1,788	-
3 Export	-	-	-1,460	-1,989	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	97	-2	-155	-880	-
6 Total Primary Energy Supply	649	124	7,212	-1,081	1,720
7 Public Electricity	-220	-	-	-299	-342
8 Autoproducers of Electricity	-	-	-	-262	-23
9 Gas Processing	-	-126	-	-	-617
10 Petroleum Refineries	-	-	-8,049	8,107	-
11 Coal Transformation	-26	61	-	-	-
12 Loss & Own Use	-	-0	-	-199	-247
13 Discrepancy	6	-5	838	-79	-470
14 Total Final Energy Consumption	409	54	-	6,186	20
15 Industry Sector	409	54	-	1,737	20
16 Transport Sector	-	-	-	3,088	-
17 Other Sector	-	-	-	1,197	0
17.1 Agriculture	-	-	-	34	-
17.2 Residential & Commercial	-	-	-	992	0
17.3 Other	-	-	-	171	-
18 Non-energy	-	-	-	165	-

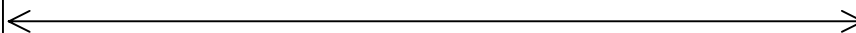
Philippines, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	882	-	674	-	2,628
2 Import	3,079	-	12,294	4,567	-
3 Export	-	-	-654	-1,575	-
4 International Marine Bunkers	-	-	-	-782	-
5 Stock Change	-	-	-112	-36	-
6 Total Primary Energy Supply	3,961	-	12,202	2,174	2,628
7 Public Electricity	-3,050	-	-	-1,613	-2,628
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-11,860	11,636	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-29	-	-514	-	-
13 Discrepancy	2	-	172	958	-
14 Total Final Energy Consumption	885	-	-	13,155	-
15 Industry Sector	770	-	-	2,088	-
16 Transport Sector	-	-	-	8,673	-
17 Other Sector	-	-	-	2,269	-
17.1 Agriculture	-	-	-	349	-
17.2 Residential & Commercial	-	-	-	1,920	-
17.3 Other	-	-	-	-	-
18 Non-energy	115	-	-	125	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,594	-	55	-	-	-	7,995
-	-	-	-	-	-	-	6,667
-	-	-	-	-	-	-	-3,449
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-940
-	1,594	-	55	-	-	-	10,273
-	-1,558	-	-	-	1,837	-	-582
-	-36	-	-	-	135	-	-187
-	-	-	-	-	-	-	-743
-	-	-	-	-	-	-	58
-	-	-	-	-	-	-	35
-	-	-	-	-	-35	-	-481
-	-0	-	-	-	-199	-	90
-	-	-	55	-	1,738	-	8,462
-	-	-	-	-	1,032	-	3,252
-	-	-	-	-	-	-	3,088
-	-	-	55	-	705	-	1,958
-	-	-	-	-	47	-	80
-	-	-	55	-	631	-	1,679
-	-	-	-	-	28	-	199
-	-	-	-	-	-	-	165

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	677	-	8,447	-	-	-	13,308
-	-	-	-	-	-	-	19,940
-	-	-	-	-	-	-	-2,229
-	-	-	-	-	-	-	-782
-	-	-	-	-	-	-	-148
-	677	-	8,447	-	-	-	30,088
-	-677	-	-8,447	-	4,546	-	-11,868
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-224
-	-	-	-	-	-	-	-
-	-	-	-	-	-879	-	-1,422
-	-	-	-	-	-0	-	1,133
-	-	-	-	-	3,667	-	17,707
-	-	-	-	-	1,299	-	4,158
-	-	-	-	-	5	-	8,677
-	-	-	-	-	2,363	-	4,631
-	-	-	-	-	6	-	355
-	-	-	-	-	2,357	-	4,277
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	240

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Russia, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	107,020	-	420,675	-	499,830
2 Import	9,633	1	5,766	3	7,072
3 Export	-22,828	-2,453	-228,995	-69,547	-152,983
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-974	-	1,213	26	-11,319
6 Total Primary Energy Supply	92,852	-2,451	198,658	-69,518	342,600
7 Public Electricity	-44,658	-268	-	-8,624	-123,464
8 Autoproducers of Electricity	-16,389	-4,433	-918	-11,987	-78,506
9 Gas Processing	-	17,931	-	-	-4,834
10 Petroleum Refineries	-	-	-193,892	180,225	-
11 Coal Transformation	-25,224	26,132	-	-	-
12 Loss & Own Use	-396	-75	-1,382	-13,707	-16,098
13 Discrepancy	-8	-176	-2,357	-13,687	4,039
14 Total Final Energy Consumption	6,175	36,660	110	62,702	123,736
15 Industry Sector	1,298	36,643	56	9,934	27,501
16 Transport Sector	229	5	13	41,050	31,150
17 Other Sector	4,649	12	41	9,531	49,336
17.1 Agriculture	156	0	7	4,594	509
17.2 Residential & Commercial	3,854	8	34	4,937	46,243
17.3 Other	639	4	-	-	2,584
18 Non-energy	-	-	-	362	15,749

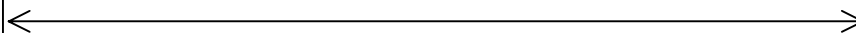
Singapore, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	-	-	-
2 Import	0	8	40,082	46,571	3,285
3 Export	-0	-	-	-45,507	-
4 International Marine Bunkers	-	-	-	-24,528	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	0	8	40,082	-23,464	3,285
7 Public Electricity	-	-	-	-2,803	-3,285
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-129	-
10 Petroleum Refineries	-	-	-40,082	38,079	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-576	-
13 Discrepancy	-0	-8	-	-2,462	-0
14 Total Final Energy Consumption	-	-	-	8,644	-
15 Industry Sector	-	-	-	4,170	-
16 Transport Sector	-	-	-	4,224	-
17 Other Sector	-	-	-	-	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	-	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	250	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	13,564	39,180	279	6,084	-	-	1,086,633
-	-	-	-	-	709	-	23,184
-	-	-	-	-	-1,859	-	-478,666
-	-	-	-	-	-	-	-
-	-	-	-	71	-	-	-10,983
-	13,564	39,180	279	6,155	-1,150	-	620,168
-	-13,483	-39,180	-279	-1	74,761	56,377	-98,819
-	-81	-	-	-3,252	3,697	94,234	-17,636
-	-	-	-	-	-	-	13,097
-	-	-	-	-	-	-	-13,667
-	-	-	-	-	-	-	908
-	-	-	-	-265	-23,278	-18,629	-73,831
-	-0	-	-	0	342	0	-11,846
-	-	-	-	2,637	54,372	131,982	418,375
-	-	-	-	380	28,233	48,245	152,289
-	-	-	-	-	6,467	-	78,914
-	-	-	-	2,257	19,673	83,738	169,236
-	-	-	-	119	1,750	3,410	10,546
-	-	-	-	1,843	17,923	80,327	155,169
-	-	-	-	295	-	-	3,521
-	-	-	-	-	-	-	16,111

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	123	-	-	123
-	-	-	-	-	-	-	89,947
-	-	-	-	-	-	-	-45,508
-	-	-	-	-	-	-	-24,528
-	-	-	-	-	-	-	-
-	-	-	-	123	-	-	20,035
-	-	-	-	-123	3,038	-	-3,173
-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-24
-	-	-	-	-	-	-	-2,003
-	-	-	-	-	-	-	-
-	-	-	-	-	-288	-	-864
1	-	-	-	-	-	-	-2,470
106	-	-	-	-	2,751	-	11,501
60	-	-	-	-	1,179	-	5,409
-	-	-	-	-	27	-	4,251
46	-	-	-	-	1,545	-	1,591
-	-	-	-	-	3	-	3
46	-	-	-	-	1,542	-	1,588
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	250

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Chinese Taipei, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	39	-	666
2 Import	33,625	121	44,236	8,281	6,505
3 Export	-	-	-	-9,761	-
4 International Marine Bunkers	-	-	-	-2,825	-
5 Stock Change	-45	-26	-209	1,201	43
6 Total Primary Energy Supply	33,580	95	44,066	-3,104	7,214
7 Public Electricity	-18,643	-	-	-2,916	-4,833
8 Autoproducers of Electricity	-5,730	-425	-	-905	-231
9 Gas Processing	-	-	-	-	-1,472
10 Petroleum Refineries	-	-	-45,767	46,697	-3
11 Coal Transformation	-3,758	4,697	-	-	-
12 Loss & Own Use	-	-0	-	-2,038	-
13 Discrepancy	-584	0	1,702	-1,970	-675
14 Total Final Energy Consumption	4,865	4,368	-	35,764	-
15 Industry Sector	4,563	4,368	-	17,657	-
16 Transport Sector	-	-	-	12,808	-
17 Other Sector	-	-	-	3,785	-
17.1 Agriculture	-	-	-	898	-
17.2 Residential & Commercial	-	-	-	2,886	-
17.3 Other	-	-	-	-	-
18 Non-energy	301	-	-	1,514	-

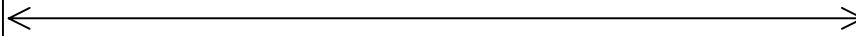
Thailand, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,520	-	7,736	-	18,984
2 Import	4,500	43	39,082	867	7,071
3 Export	-	-	-3,092	-4,901	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-353	-	1,949	-613	-
6 Total Primary Energy Supply	9,667	43	45,674	-4,647	26,054
7 Public Electricity	-4,459	-	-	-715	-19,642
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	498	1,941	-179
10 Petroleum Refineries	-	-	-43,396	34,381	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-170	-	-3,916
13 Discrepancy	-217	-	-0	249	-1
14 Total Final Energy Consumption	4,991	43	2,607	31,208	2,316
15 Industry Sector	4,991	43	-	4,503	1,995
16 Transport Sector	-	-	-	21,107	13
17 Other Sector	-	-	-	5,099	-
17.1 Agriculture	-	-	-	3,320	-
17.2 Residential & Commercial	-	-	-	1,778	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	2,607	476	308

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	593	10,135	-	-	-	-	11,432
-	-	-	-	-	-	-	92,768
-	-	-	-	-	-	-	-9,761
-	-	-	-	-	-	-	-2,825
-	-	-	-	-	-	-	964
-	593	10,135	-	-	-	-	92,579
-	-593	-10,135	-	-	14,711	-	-22,408
-	-	-	-	-	3,267	-	-4,024
1,407	-	-	-	-	-	-	-65
-	-	-	-	-	-	-	927
-	-	-	-	-	-	-	939
-395	-	-	-	-	-2,351	-	-4,784
675	-	-	-	-	0	-	-852
1,687	-	-	-	-	15,628	-	62,312
802	-	-	-	-	8,502	-	35,892
-	-	-	-	-	106	-	12,914
885	-	-	-	-	7,020	-	11,690
-	-	-	-	-	208	-	1,106
885	-	-	-	-	6,812	-	10,584
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,815

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	628	-	2	-	-	-	32,868
-	-	-	-	-	213	-	51,776
-	-	-	-	-	-25	-	-8,019
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	983
-	628	-	2	-	188	-	77,608
-	-628	-	-2	-	10,061	-	-15,385
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,261
-	-	-	-	-	-	-	-9,015
-	-	-	-	-	-	-	-
-	-	-	-	-	-1,050	-	-5,136
-	-	-	-	-	-0	-	30
-	-	-	-	-	9,198	-	50,364
-	-	-	-	-	4,126	-	15,659
-	-	-	-	-	3	-	21,123
-	-	-	-	-	4,976	-	10,075
-	-	-	-	-	19	-	3,339
-	-	-	-	-	4,957	-	6,736
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3,391

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United States of America, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	525,496	-	295,490	55,322	446,585
2 Import	14,914	1,642	560,094	85,209	92,843
3 Export	-25,082	-430	-3,466	-47,089	-15,829
4 International Marine Bunkers	-	-	-	-19,222	-
5 Stock Change	13,975	135	-5,034	106	-4,430
6 Total Primary Energy Supply	529,303	1,347	847,084	74,327	519,169
7 Public Electricity	-488,101	-	-	-24,644	-119,247
8 Autoproducers of Electricity	-5,684	-	-	-1,193	-16,478
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-834,461	849,819	-
11 Coal Transformation	-14,205	12,244	-	-	-
12 Loss & Own Use	-	-	-	-46,750	-
13 Discrepancy	3,939	-0	-12,623	-3,404	3,844
14 Total Final Energy Consumption	25,252	13,591	-	848,154	387,289
15 Industry Sector	22,923	13,591	-	169,395	177,923
16 Transport Sector	-	-	-	616,908	15,975
17 Other Sector	2,329	-	-	61,852	193,391
17.1 Agriculture	361	-	-	13,068	-
17.2 Residential & Commercial	1,969	-	-	48,784	193,391
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

Viet Nam, 2003

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	10,619	-	17,917	-	2,776
2 Import	-	-	-	10,456	-
3 Export	-4,058	-	-17,452	-562	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-323	-	-
6 Total Primary Energy Supply	6,562	-	143	9,894	2,776
7 Public Electricity	-2,225	-	-	-744	-2,136
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	489	-622
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-143	-	-
13 Discrepancy	0	-	0	-0	-0
14 Total Final Energy Consumption	4,337	-	-	9,639	18
15 Industry Sector	3,113	-	-	2,165	18
16 Transport Sector	-	-	-	5,561	-
17 Other Sector	1,224	-	-	1,730	-
17.1 Agriculture	24	-	-	410	-
17.2 Residential & Commercial	1,200	-	-	1,320	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	183	-

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114



Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	23,960	205,443	9,570	6,655	-	-	1,568,520
-	-	-	-	-	861	-	755,562
-	-	-	-	-	-679	-	-92,575
-	-	-	-	-	-	-	-19,222
-	-	-	-	-	-	-	4,754
-	23,960	205,443	9,570	6,655	182	-	2,217,039
-	-23,587	-205,443	-8,610	-3,470	333,993	-	-539,109
-	-373	-	-	-3,185	14,400	-	-12,513
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	15,359
-	-	-	-	-	-	-	-1,962
-	-	-	-	-	-50,397	-	-97,148
-	0	-	6	0	672	-	-7,566
-	-	-	966	-	298,849	-	1,574,100
-	-	-	127	-	92,170	-	476,128
-	-	-	-	-	400	-	633,283
-	-	-	838	-	206,279	-	464,689
-	-	-	-	-	-	-	13,429
-	-	-	838	-	206,279	-	451,261
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,633	-	-	-	-	-	32,944
-	-	-	-	-	-	-	10,456
-	-	-	-	-	-	-	-22,071
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-323
-	1,633	-	-	-	-	-	21,007
-	-1,633	-	-	-	3,520	-	-3,218
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-133
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-524	-	-666
-	-	-	-	-	0	-	-0
-	-	-	-	-	2,996	-	16,989
-	-	-	-	-	1,307	-	6,604
-	-	-	-	-	10	-	5,571
-	-	-	-	-	1,678	-	4,632
-	-	-	-	-	48	-	481
-	-	-	-	-	1,631	-	4,151
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	183

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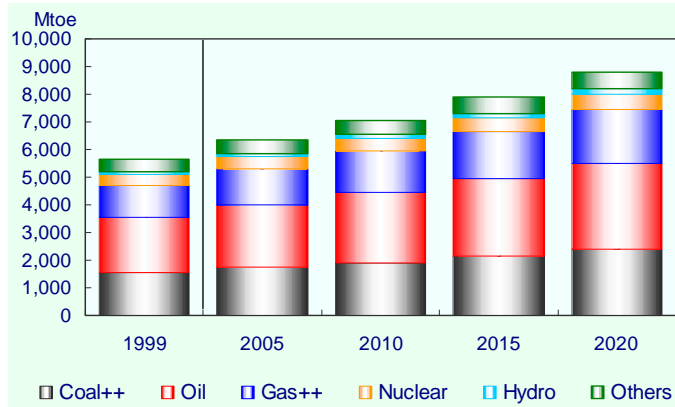
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Outlook

Primary Energy Supply Outlook by Energy



	1999	2005	2010	2015	Mtoe 2020
Coal++	1,540	1,743	1,905	2,128	2,402
Oil	2,023	2,250	2,522	2,802	3,107
Gas++	1,135	1,329	1,536	1,733	1,949
Nuclear	379	407	425	486	537
Hydro	106	125	146	166	185
Others	477	512	540	568	596
Total	5,659	6,366	7,074	7,883	8,777

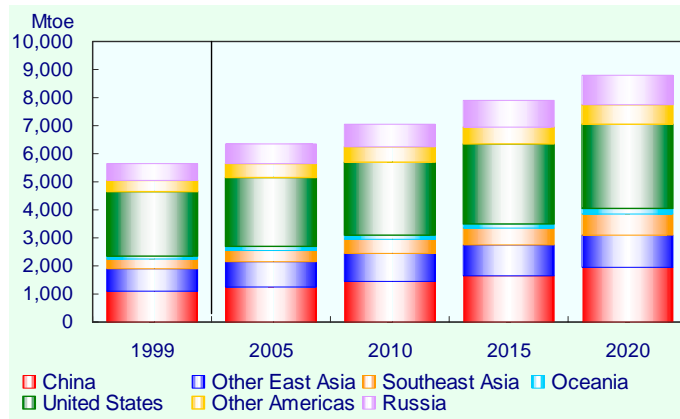
	1999	2005	2010	2015	Share (%) 2020
Coal++	27.2	27.4	26.9	27.0	27.4
Oil	35.7	35.3	35.7	35.5	35.4
Gas++	20.1	20.9	21.7	22.0	22.2
Nuclear	6.7	6.4	6.0	6.2	6.1
Hydro	1.9	2.0	2.1	2.1	2.1
Others	8.4	8.0	7.6	7.2	6.8

By Asia Pacific Energy Research Centre, September 2002.

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Primary Energy Supply Outlook by Region



	Mtoe				
	1999	2005	2010	2015	2020
China	1,088	1,263	1,441	1,663	1,947
Other East Asia	794	878	984	1,078	1,167
Southeast Asia	350	421	504	609	733
Oceania	128	146	159	175	191
United States	2,270	2,446	2,620	2,818	3,015
Other Americas	432	495	560	625	692
Russia	597	716	805	917	1,031
APEC 21	5,659	6,366	7,074	7,883	8,777

	Share (%)				
	1999	2005	2010	2015	2020
China	19.2	19.8	20.4	21.1	22.2
Other East Asia	14.0	13.8	13.9	13.7	13.3
Southeast Asia	6.2	6.6	7.1	7.7	8.4
Oceania	2.3	2.3	2.3	2.2	2.2
United States	40.1	38.4	37.0	35.7	34.4
Other Americas	7.6	7.8	7.9	7.9	7.9
Russia	10.6	11.2	11.4	11.6	11.7

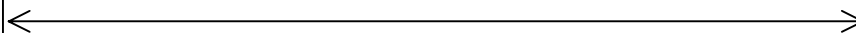
Other East Asia includes Hong Kong, China; Japan; Republic of Korea and Chinese Taipei.
 Other Americas includes Canada, Chile, Mexico, and Peru.
 Southeast Asia includes Viet Nam.

Outlook

Selected Energy Indicators APEC Region

	Population			Real GDP			Real GDP	
	Millions			Billions of 1995 Price and 1995 USD			Billions of 1995 Price and 1995 PPP	
	1980	1990	2003	1980	1990	2003	1980	1990
APEC 19	1,787	2,064	2,378	9,762	14,177	20,592	9,404	14,025
APEC 21	1,980	2,278	2,603	-	14,696	21,028	-	15,509
East Asia	1,159	1,328	1,493	3,758	5,968	8,409	2,681	4,814
China	981.2	1,135.2	1,288.4	163.6	397.6	1,324.8	706.2	1,716.2
Hong Kong, China	5.0	5.7	6.8	58.1	108.0	177.7	54.6	101.5
Japan	116.8	123.5	127.6	3,297.7	4,924.8	5,817.0	1,762.4	2,632.0
Republic of Korea	38.1	42.9	47.9	153.8	355.0	733.4	157.8	364.4
Chinese Taipei	17.8	20.4	22.5	85.2	182.5	355.7	-	-
Southeast Asia	259	316	388	247	432	778	568	951
Brunei Darussalam	0.2	0.3	0.4	5.7	4.8	6.1	6.2	5.3
Indonesia	148.3	178.2	214.7	74.6	138.4	233.7	197.2	365.9
Malaysia	13.8	18.2	24.8	31.6	56.5	123.5	52.0	92.8
Philippines	48.0	61.0	81.5	56.3	66.6	101.0	178.7	211.2
Singapore	2.4	3.0	4.3	26.8	54.5	115.9	20.1	41.0
Thailand	46.7	55.6	62.0	52.2	111.1	197.6	107.9	229.7
Oceania	21	24	29	281	373	581	294	389
Australia	14.7	17.1	19.9	235.4	317.8	499.1	243.4	328.5
New Zealand	3.1	3.4	4.0	43.4	52.2	77.2	44.5	53.6
Papua New Guinea	3.1	4.0	5.5	2.7	3.0	4.8	6.2	7.0
North America	252	277	322	5,179	7,055	10,290	5,248	7,146
Canada	24.6	27.8	31.6	406.8	534.4	765.3	457.2	600.7
United States of America	227.2	249.4	290.8	4,771.9	6,520.5	9,525.1	4,790.3	6,545.6
Latin America	96.0	117.9	145.2	296.0	349.3	534.0	618.8	729.3
Chile	11.1	13.1	15.8	29.7	43.0	87.6	47.6	68.9
Mexico	67.6	83.2	102.3	221.8	265.3	380.4	487.6	583.3
Peru	17.3	21.6	27.1	44.5	41.1	66.0	83.6	77.1
Russia	139.0	148.3	143.4	-	504.4	400.9	-	1,414.8
Viet Nam	53.7	66.2	81.3	-	14.0	35.6	-	69.9

Note: Chinese Taipei is not included in the Real GDP (1995 Price and 1995 PPP) of APEC 19, APEC 21 and East Asia.



	Energy Indigenous Production				Net Import			Total Primary Energy Supply			
	Mtoe				Mtoe			Mtoe			
2003	1980	1990	2003	1980	1990	2003	1980	1990	2003		
23,572	2,558.2	3,196.4	3,985.3	500.6	540.9	1,075.9	3,030.9	3,650.0	5,005.6		
24,877	2,558.2	3,202.2	5,104.8	-	-	608.9	-	-	5,646.8		
9,725	478	775	1,152	341	452	750	821	1,200	1,888		
5,672.3	414.1	670.5	1,022.6	-18.6	-29.0	48.3	399.6	621.2	1,067.7	CHN	
166.9	0.0	0.0	0.0	6.0	10.8	20.6	5.3	10.6	15.6	HKG	
3,132.9	48.7	72.6	78.6	303.2	361.6	421.6	352.6	432.5	498.2	JPN	
752.7	9.2	21.7	39.0	29.6	69.5	175.9	38.3	89.4	214.3	KOR	
-	5.7	10.7	11.4	20.3	39.4	83.0	25.1	46.0	92.6	TWN	
1,649	132	199	337	-54	-52	-20	71	133	293		
5.8	20.7	15.3	21.8	-17.4	-12.9	-18.0	3.2	2.1	3.8	BRN	
617.9	92.1	119.4	185.0	-60.7	-65.9	-81.4	31.1	53.3	103.4	IDN	
202.8	16.1	46.5	83.7	-5.0	-25.4	-26.2	10.6	21.0	58.4	MYS	
320.5	2.7	6.0	13.3	10.4	11.4	17.7	12.4	17.3	30.1	PHL	
87.2	0.0	0.0	0.1	6.7	22.9	44.4	2.0	9.9	20.0	SGP	
408.7	0.5	11.9	32.9	12.0	18.2	43.8	12.1	29.9	77.6	THA	
609	92	175	274	-14	-67	-128	79	103	144		
517.9	86.1	158.2	257.2	-18.3	-65.3	-131.0	69.3	87.9	123.5	AUS	
79.6	6.0	12.4	14.4	4.0	2.2	4.5	9.5	14.2	18.7	NZL	
11.2	0.0	4.6	2.6	0.6	-3.7	-1.1	0.6	0.9	1.6	PNG	
10,493	1,689	1,839	1,964	278	266	536	1,943	2,070	2,488		
856.5	207.7	277.4	395.3	-11.0	-68.4	-127.4	194.2	206.0	271.1	CAN	
9,636.9	1,481.4	1,561.4	1,568.5	288.6	334.8	663.0	1,748.6	1,863.6	2,217.0	USA	
1,102.5	167.2	207.8	258.7	-49.9	-59.4	-61.8	116.3	144.2	192.1		
140.4	7.0	7.8	9.9	4.1	7.0	16.4	11.0	14.3	25.0	CHL	
838.1	149.0	191.9	240.8	-51.0	-65.7	-81.5	97.2	122.4	156.8	MEX	
124.0	11.1	8.2	8.0	-3.0	-0.6	3.2	8.2	7.5	10.3	PER	
1,126.3	0.0	0.0	1,086.6	-	-	-455.5	-	-	620.2	RUS	
178.1	0.0	5.8	32.9	-	-	10.5	-	-	21.0	VNM	

Energy Indicators

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Energy Indicators

	Total Final Energy Consumption			Final Consumption of Electricity			Total Primary Energy Supply	
	Mtoe			TWh			toe / Person	
	1980	1990	2003	1980	1990	2003	1980	1990
APEC 19	2,388.1	2,783.6	3,452.7	3,491.5	5,060.0	7,814.5	1.70	1.77
APEC 21	-	-	3,888.0	-	-	8,481.6	-	-
East Asia	610.2	882.8	1,277.1	864.1	1,510.1	2,967.9	0.71	0.90
China	301.4	469.3	690.3	271.6	573.1	1,484.1	0.41	0.55
Hong Kong, China	3.5	6.7	10.5	10.9	23.8	38.4	1.05	1.87
Japan	252.7	305.1	357.2	511.9	744.8	970.1	3.02	3.50
Republic of Korea	35.7	71.9	156.7	32.7	94.4	293.6	1.01	2.08
Chinese Taipei	17.0	29.8	62.3	36.9	74.0	181.7	1.41	2.26
Southeast Asia	48.1	85.3	181.8	50.5	123.2	379.6	0.28	0.42
Brunei Darussalam	0.2	0.4	0.7	0.3	1.0	2.7	16.81	8.06
Indonesia	21.1	34.0	66.9	7.3	30.5	121.9	0.21	0.30
Malaysia	6.4	13.1	34.6	8.7	19.9	73.4	0.77	1.15
Philippines	9.0	10.3	17.7	15.0	19.3	42.6	0.26	0.28
Singapore	2.1	5.3	11.5	6.1	14.2	32.0	0.82	3.25
Thailand	9.3	22.2	50.4	13.1	38.3	107.0	0.26	0.54
Oceania	59.3	74.0	94.4	101.6	162.4	239.6	3.80	4.20
Australia	51.5	63.2	79.8	81.0	133.1	201.4	4.72	5.15
New Zealand	7.3	10.1	13.5	19.4	27.7	35.2	3.05	4.11
Papua New Guinea	0.4	0.6	1.1	1.2	1.7	3.0	0.20	0.22
North America	1,591.0	1,639.9	1,773.8	2,404.6	3,144.9	4,002.6	7.72	7.47
Canada	156.7	164.6	199.7	307.4	432.9	527.6	7.90	7.41
United States of America	1,434.3	1,475.2	1,574.1	2,097.2	2,712.0	3,475.0	7.70	7.47
Latin America	79.6	101.7	125.6	70.7	119.3	224.9	1.21	1.22
Chile	8.3	11.0	19.7	9.7	15.4	44.3	0.98	1.09
Mexico	65.1	84.4	97.4	52.3	92.1	160.4	1.44	1.47
Peru	6.2	6.2	8.5	8.7	11.8	20.2	0.47	0.35
Russia	-	-	418.4	-	-	632.2	-	-
Viet Nam	-	-	17.0	-	-	34.8	-	-

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	Total Primary Energy Supply per Real GDP			Total Primary Energy Supply per Real GDP			Total Final Energy Consumption per Capita				
	toe / Million 1995 USD			toe / Million 1995 PPP			toe / Person				
	2003	1980	1990	2003	1980	1990	2003	1980	1990		2003
	2.11	310.5	257.5	243.1	319.7	257.0	208.4	1.3	1.3	1.5	
	2.17	-	-	268.5	-	-	223.3	-	-	1.5	
	1.26	218.4	201.0	224.6	296.8	239.7	184.7	0.5	0.7	0.9	
	0.83	2,442.7	1,562.5	806.0	565.9	362.0	188.2	0.3	0.4	0.5	CHN
	2.29	91.0	98.5	87.8	97.0	104.9	93.4	0.7	1.2	1.5	HKG
	3.91	106.9	87.8	85.6	200.1	164.3	159.0	2.2	2.5	2.8	JPN
	4.47	249.2	251.7	292.2	242.8	245.2	284.7	0.9	1.7	3.3	KOR
	4.11	294.6	252.0	260.3	-	-	-	1.0	1.5	2.8	TWN
	0.76	288.8	308.9	377.1	125.6	140.3	177.9	0.2	0.3	0.5	
	10.65	571.2	430.8	624.4	520.8	392.8	651.2	1.2	1.6	2.0	BRN
	0.48	416.5	384.7	442.3	157.6	145.6	167.3	0.1	0.2	0.3	IDN
	2.36	333.8	371.2	473.2	203.1	225.9	288.2	0.5	0.7	1.4	MYS
	0.37	220.8	260.1	297.9	69.6	82.0	93.9	0.2	0.2	0.2	PHL
	4.71	73.8	181.5	172.9	98.2	241.5	229.8	0.9	1.7	2.7	SGP
	1.25	231.9	269.5	392.7	112.2	130.3	189.9	0.2	0.4	0.8	THA
	4.89	282.2	276.1	247.4	270.0	264.6	236.2	2.8	3.0	3.2	
	6.21	294.3	276.7	247.5	284.7	267.7	238.5	3.5	3.7	4.0	AUS
	4.66	219.1	271.5	242.3	213.3	264.4	234.8	2.3	2.9	3.4	NZL
	0.28	234.7	283.6	320.4	101.9	123.1	138.8	0.1	0.2	0.2	PNG
	7.72	375.2	293.3	241.8	370.2	289.6	237.1	6.3	5.9	5.5	
	8.57	477.6	385.4	354.2	424.8	342.9	316.5	6.4	5.9	6.3	CAN
	7.62	366.4	285.8	232.8	365.0	284.7	230.1	6.3	5.9	5.4	USA
	1.32	393.0	412.9	359.7	188.0	197.8	174.2	0.8	0.9	0.9	
	1.59	369.3	331.6	285.7	230.4	206.9	178.1	0.7	0.8	1.2	CHL
	1.53	438.1	461.6	412.1	199.2	209.9	187.1	1.0	1.0	1.0	MEX
	0.38	183.9	183.5	155.6	98.0	97.7	82.8	0.4	0.3	0.3	PER
	4.32	-	-	1,547.0	-	-	550.6	-	-	2.9	RUS
	0.26	-	-	590.0	-	-	118.0	-	-	0.2	VNM

Note: Chinese Taipei is not included in the Total Primary Energy Supply per Real GDP (1995 PPP) of APEC 19, APEC 21 and East Asia.

Energy Indicators

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Energy Indicators

	Energy Related CO ₂ Emission			CO ₂ Emission per Capita		
	Mt-C			t-C / Person		
	1980	1990	2003	1980	1990	2003
APEC 19	-	-	3,729	-	-	1.568
APEC 21	-	-	4,197	-	-	1.613
East Asia	661.2	942.2	1,526.8	0.571	0.710	1.022
China	354.4	554.2	1,005.9	0.361	0.488	0.781
Hong Kong, China	4.0	9.2	10.2	0.793	1.613	1.496
Japan	251.5	287.2	324.5	2.154	2.325	2.544
Republic of Korea	32.8	60.6	117.7	0.861	1.413	2.457
Chinese Taipei	18.5	30.9	68.4	1.038	1.520	3.037
Southeast Asia	-	-	207.1	-	-	0.534
Brunei Darussalam	0.6	1.1	2.0	3.337	4.440	5.513
Indonesia	17.3	37.0	78.2	0.117	0.208	0.364
Malaysia	8.1	15.5	39.6	0.586	0.851	1.597
Philippines	8.2	9.7	18.4	0.171	0.159	0.226
Singapore	1.7	8.3	16.0	0.688	2.714	3.769
Thailand	-	-	52.9	-	-	0.853
Oceania	-	-	124.9	-	-	4.249
Australia	-	68.9	92.7	-	4.036	4.664
New Zealand	-	22.4	30.9	-	6.482	7.715
Papua New Guinea	-	-	1.2	-	-	0.221
North America	1,415.8	1,488.3	1,739.8	5.622	5.369	5.396
Canada	119.1	124.3	157.4	4.844	4.472	4.976
United States of America	1,296.7	1,364.0	1,582.4	5.707	5.468	5.441
Latin America	75.3	91.5	130.1	0.784	0.776	0.896
Chile	6.4	9.3	16.4	0.577	0.707	1.039
Mexico	63.0	76.8	106.4	0.932	0.923	1.040
Peru	5.9	5.5	7.4	0.338	0.253	0.272
Russia	-	-	450.8	-	-	3.143
Viet Nam	-	-	17.5	-	-	0.215

=66x48+231+0

=66x48+231+162

CO ₂ Emission per Real GDP			CO ₂ Emission per Real GDP			CO ₂ Emission per Total Primary Energy Supply			
kt-C / Billions of 1995 USD			kt-C / Billions of 1995 PPP			t-C / toe			
1980	1990	2003	1980	1990	2003	1980	1990	2003	
-	-	181.1	-	-	155.3	-	-	0.745	
-	-	199.6	-	-	166.0	-	-	0.743	
175.9	157.9	181.6	239.7	189.3	150.0	0.805	0.785	0.809	
2,166.5	1,393.9	759.3	501.9	322.9	177.3	0.887	0.892	0.942	CHN
68.8	85.2	57.4	73.2	90.7	61.1	0.755	0.864	0.654	HKG
76.3	58.3	55.8	142.7	109.1	103.6	0.713	0.664	0.651	JPN
213.3	170.7	160.5	207.9	166.3	156.4	0.856	0.678	0.549	KOR
216.9	169.5	192.4	-	-	-	0.736	0.673	0.739	TWN
-	-	266.2	-	-	125.6	-	-	0.706	
113.4	237.3	323.1	103.4	216.4	336.9	0.198	0.551	0.517	BRN
232.1	267.2	334.5	87.8	101.1	126.5	0.557	0.695	0.756	IDN
255.0	274.0	320.4	155.2	166.7	195.1	0.764	0.738	0.677	MYS
145.5	146.1	182.4	45.9	46.1	57.5	0.659	0.562	0.612	PHL
62.0	151.7	138.2	82.5	201.9	183.7	0.840	0.836	0.800	SGP
-	-	267.8	-	-	129.5	-	-	0.682	THA
-	-	214.9	-	-	205.1	-	-	0.868	
-	216.8	185.8	-	209.7	179.0	-	0.783	0.751	AUS
-	427.9	400.9	-	416.6	388.5	-	1.576	1.655	NZL
-	-	250.7	-	-	108.6	-	-	0.783	PNG
273.4	211.0	169.1	269.8	208.3	165.8	0.729	0.719	0.699	
292.9	232.6	205.6	260.6	206.9	183.8	0.613	0.603	0.581	CAN
271.7	209.2	166.1	270.7	208.4	164.2	0.742	0.732	0.714	USA
254.4	262.0	243.7	121.7	125.5	118.0	0.647	0.634	0.678	
216.6	215.2	187.2	135.1	134.3	116.7	0.587	0.649	0.655	CHL
284.1	289.5	279.6	129.2	131.7	126.9	0.648	0.627	0.678	MEX
131.6	132.8	111.8	70.1	70.7	59.5	0.715	0.724	0.719	PER
-	-	1,124.7	-	-	400.3	-	-	0.727	RUS
-	-	490.8	-	-	98.1	-	-	0.832	VNM

Note: Chinese Taipei is not included in the CO₂ Emission per Real GDP (1995 PPP) of APEC 19, APEC 21 and East Asia.

Glossary

General note

For editing convenience the definition for some items with “++” mark are different with APEC Energy Statistics 2002. In the Energy Balance sector the definition for all item are same as APEC Energy Statistics 2002.

Energies

Coal++

Defined as coal in narrow sense (all primary coal such as hard coal, lignite and brown coal) plus coal products (all fuels derived from coal including patent fuel, coke oven coke, gas coke, briquettes, coke oven gas and blast furnace gas).

Coal

Coal includes all primary coal, such as hard coal, lignite and brown coal.

Coal Products

Coal Products includes all fuels derived from coal including patent fuel, coke oven coke, gas coke, briquettes, coke oven gas and blast furnace gas.

Oil

Defined as crude oil (which comprises crude oil, refinery feedstocks and natural gas liquids and Natural LPG) plus petroleum products.

Crude Oil

Crude Oil comprises crude oil, refinery feedstocks and natural gas liquids.

Petroleum Products

Total of all petroleum products, such as LPG, naphtha, MOGAS, jet fuel (including AVGAS), kerosene, diesel oil, fuel oil, refinery gas and other petroleum products.

Mogas

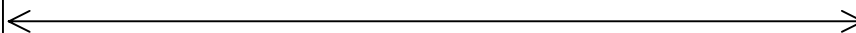
Mogas is light hydrocarbon oil for use in internal engines such as motor vehicles, excluding aircraft. Motor gasoline is distilled between 35 °C and 215 °C and treated by reforming, catalytic cracking or blending with aromatic fraction to reach a sufficiently high octane number (≥80 RON).

Naphtha

Naphtha includes light or medium oils, a cut covering the end of the motor spirit and the beginning of the kerosene range. Naphtha distills between 30 °C and 210 °C.

Jet Fuel

Jet fuel comprises both gasoline and kerosene type jet fuels meeting



specifications for use in aviation turbine power units.

Gasoline type: This includes all light hydrocarbon oils, distilling between 100 °C and 250 °C. It distills at least 20 percent in volume at 143 °C.

Kerosene type: This medium oil with same distillation characteristics and flash point as kerosene, with a maximum aromatic content of 22 percent in volume, and treated to give a kinematic viscosity of less than 18cST at -20 °C (and a freezing point below -47 °C), octane number varying from 80 to 145 RON.

Kerosene

Kerosene comprises refined petroleum distillate intermediate in volatility between gasoline and gas/diesel oil. It is a medium oil distilling between 150 °C and 300 °C, which distills at least 65 percent in volume at 250 °C. Its specific gravity is in the region of 0.80 and the flash point is above 38 °C.

Diesel Oil

Diesel oil includes heavy gas oils. Gas oils are obtained from the lowest fraction from atmospheric distillation of crude oil, while heavy gas oils obtained by vacuum redistillation of the residual from atmospheric distillation.

Fuel Oil

Fuel oil defines oils that make up the distillation residue. It comprises all residual fuel oils (including those obtained by blending). Its kinematic viscosity is above 10 cSt at 80 °C. The flash point is always above 50 °C, and the density is always more than 0.90.

LPG

LPG is the light hydrocarbon fraction of the paraffin series, derived from refinery processes and from crude oil stabilization plants comprising propane (C₃H₈) and butane (C₄H₁₀) or a mixture of these two hydrocarbon.

Others

The category, "Other petroleum products", groups together white spirit and SBP, lubricants, bitumen, paraffin waxes, refining gas and others (tar, sulfur, grease).

Gas++

Defined as natural gas and LNG plus town gas.

Natural Gas

Natural gas consists mainly of methane occurring naturally in underground deposits associated with crude oil or gas recovered from coal mines (colliery gas). Sewage gas is also included.

LNG

LNG is liquefied natural gas.

Glossary

Town Gas

Town Gas includes gas processing gas and gas works gas.

Hydro

The primary equivalent is calculated with an efficiency of 100%.

Nuclear

The primary equivalent is calculated with an efficiency of 33%.

Others

Defined as sum of geothermal power, wind, tide, photovoltaic power, etc. The primary equivalent is calculated with an efficiency of 100% except for of geothermal power, which assumed efficiency is 10%.

Sectors

Indigenous Production

Quantities of fuels extracted within the economy.

Net Imports

Defined as imports minus exports.

Total Primary Energy Supply (TPES)

Defined as indigenous production plus imports minus exports minus international marine bunkers plus or minus stock change.

Refining

Petroleum refineries shows the transformation of crude oil, NGL and condensate to petroleum products. The production of synthetic petrol from natural gas is also included.

Power Generation

Gross electricity (including power stations' own use) produced from thermal, hydro, nuclear, geothermal and other power plants of public utilities and auto-producers. An auto-producer is an establishment which, in addition to its main activities, generates electricity wholly or partially for its own use, such as industries, railways, refineries, etc.

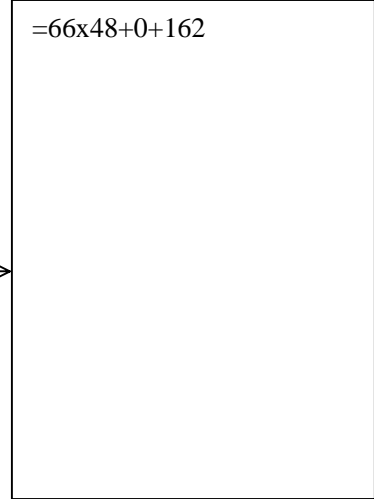
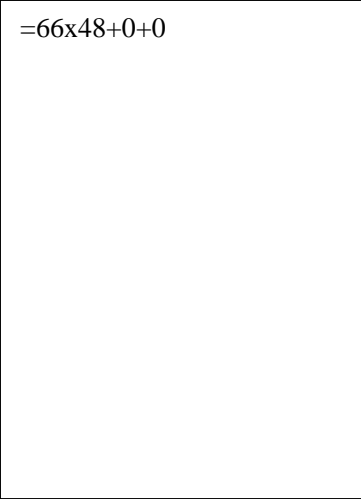
Total Final Energy Consumption

Defined as industry plus transport plus residential and commercial plus others sector.

Industry

Consumption of the industry sector is specified in the following sub-sectors (energy use for transport by industry is not included here but reported under transport):

- Iron and steel industry
- Chemical industry
- Non-ferrous metals basic industries
- Non-metallic mineral products such as glass, ceramic, cement, etc.



- Transport equipment
- Machinery, Fabricated metal products, machinery and equipment other than transport equipment
- Mining (excluding fuels) and quarrying
- Food processing, beverages and tobacco
- Pulp, paper and printing
- Wood and wood products (other than pulp and paper)
- Construction
- Textiles and leather
- Collection, purification and distribution of water
- Non-specified (any manufacturing industry not included above)

Transport

Consumption of the transport sector covers all transport activity regardless of the economic sector to which it is contributing, and is divided into the following sub-sectors:

- Air transport (international and domestic)
- Road transport
- Railways
- Internal navigation (including small craft and coastal vessels not purchasing their bunker requirements under international marine bunker contracts).

Residential and Commercial

Defined as residential plus commercial.

*Residential shows all consumption by households

*Commercial shows consumption of the commercial and public sectors.

Others

Agriculture and non-energy use sectors are included.

