



Asia-Pacific
Economic Cooperation

APEC ENERGY HANDBOOK 2001

Energy Working Group
October 2003

Coordinating Agency:
The Energy Data and Modelling Center
The Institute of Energy Economics, Japan

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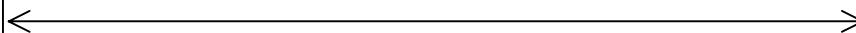
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Preface

APEC Energy Handbook 2001 is a handy, pocket-sized summary of key energy data and a supplement to APEC Energy Statistics 2001 which has been released at October 2003 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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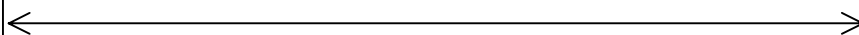


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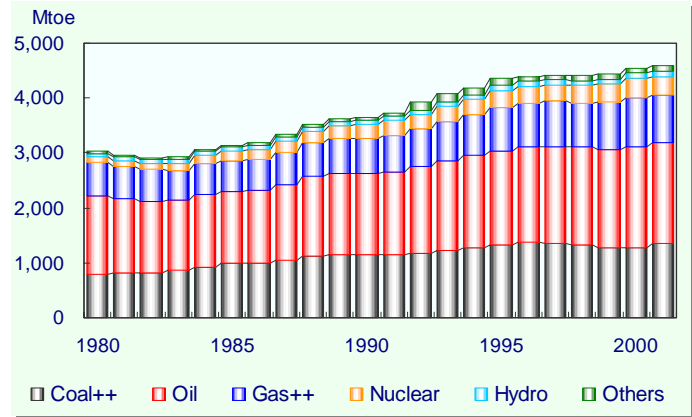
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Primary Energy Supply

Total Primary Energy Supply by Energy APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	800.2	1,139.9	1,327.8	1,263.8	1,268.3	1,342.3
Oil	1,425.7	1,497.9	1,712.5	1,803.2	1,850.2	1,836.8
Gas++	604.4	637.7	784.8	850.2	897.1	869.7
Nuclear	99.3	242.4	306.8	334.0	343.7	349.3
Hydro	65.3	78.5	91.8	94.4	94.3	91.1
Others	34.6	51.4	132.1	90.7	96.8	95.9
Total	3,029.6	3,647.8	4,355.8	4,436.3	4,550.4	4,585.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	26.4	31.2	30.5	28.5	27.9	29.3
Oil	47.1	41.1	39.3	40.6	40.7	40.1
Gas++	19.9	17.5	18.0	19.2	19.7	19.0
Nuclear	3.3	6.6	7.0	7.5	7.6	7.6
Hydro	2.2	2.2	2.1	2.1	2.1	2.0
Others	1.1	1.4	3.0	2.0	2.1	2.1

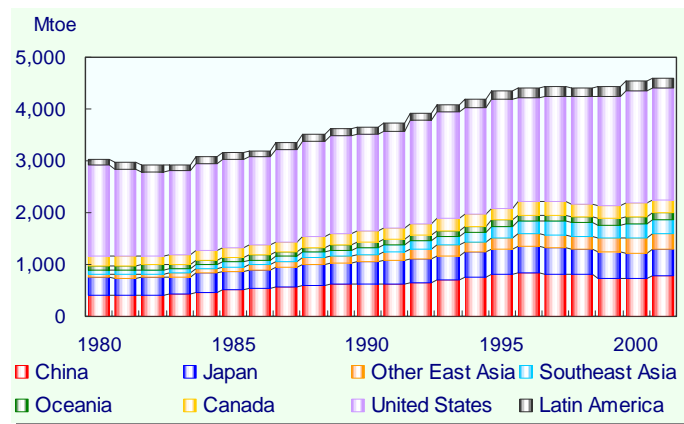
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Total Primary Energy Supply by Region APEC 19



Primary Energy Supply

	Mtoe					
	1980	1990	1995	1999	2000	2001
China	399.6	621.3	810.9	724.7	719.1	790.0
Japan	352.6	432.6	490.8	511.1	509.2	507.6
Other East Asia	67.3	143.6	221.7	267.1	282.0	289.9
Southeast Asia	71.9	133.7	216.0	253.7	276.9	278.2
Oceania	79.4	103.0	113.3	129.9	127.5	125.0
Canada	194.2	206.0	241.2	254.9	263.5	262.3
United States	1,748.7	1,863.6	2,104.4	2,113.5	2,183.1	2,144.9
Latin America	115.9	144.3	157.5	181.3	189.2	187.5
APEC 19	3,029.6	3,647.8	4,355.8	4,436.3	4,550.4	4,585.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
China	13.2	17.0	18.6	16.3	15.8	17.2
Japan	11.6	11.9	11.3	11.5	11.2	11.1
Other East Asia	2.2	3.9	5.1	6.0	6.2	6.3
Southeast Asia	2.4	3.7	5.0	5.7	6.1	6.1
Oceania	2.6	2.8	2.6	2.9	2.8	2.7
Canada	6.4	5.6	5.5	5.7	5.8	5.7
United States	57.7	51.1	48.3	47.6	48.0	46.8
Latin America	3.8	4.0	3.6	4.1	4.2	4.1

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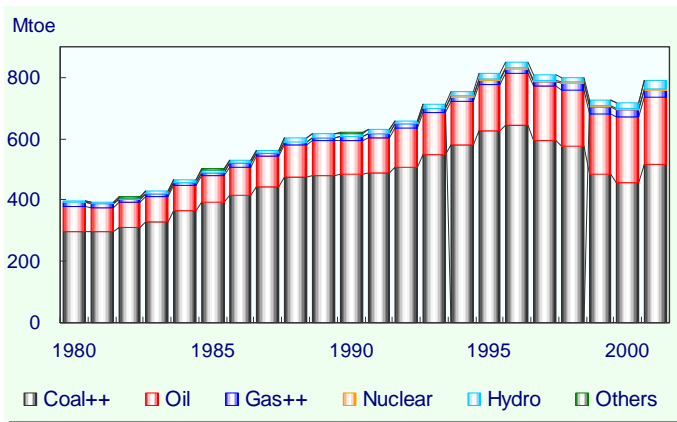
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Primary Energy Supply

Total Primary Energy Supply by Energy China



	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	297.2	486.5	626.2	484.2	457.5	515.5
Oil	83.6	108.7	150.3	197.6	213.9	219.3
Gas++	12.0	12.8	15.0	21.1	22.8	25.4
Nuclear	-	-	3.3	3.9	4.4	4.6
Hydro	5.1	10.9	16.4	17.5	19.1	23.9
Others	1.8	2.3	-0.5	0.3	1.4	1.4
Total	399.6	621.2	810.9	724.7	719.1	790.0

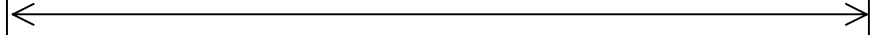
	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	74.4	78.3	77.2	66.8	63.6	65.2
Oil	20.9	17.5	18.5	27.3	29.7	27.8
Gas++	3.0	2.1	1.9	2.9	3.2	3.2
Nuclear	-	-	0.4	0.5	0.6	0.6
Hydro	1.3	1.8	2.0	2.4	2.7	3.0
Others	0.5	0.4	-0.1	0.0	0.2	0.2

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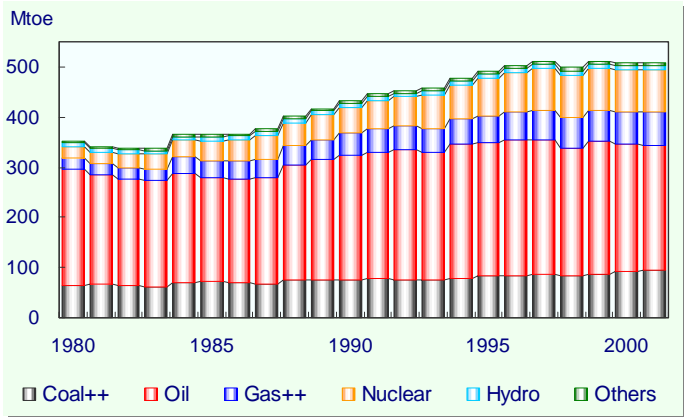
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Total Primary Energy Supply by Energy Japan



Primary Energy Supply

	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	63.6	75.6	82.8	87.8	91.0	94.7
Oil	233.7	249.1	267.5	264.1	255.8	248.1
Gas++	21.7	43.5	52.0	62.3	64.9	67.3
Nuclear	21.5	51.0	75.0	82.8	83.3	83.7
Hydro	7.8	7.8	7.1	7.6	7.5	7.4
Others	4.3	5.5	6.4	6.6	6.7	6.4
Total	352.6	432.5	490.8	511.1	509.2	507.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	18.0	17.5	16.9	17.2	17.9	18.7
Oil	66.3	57.6	54.5	51.7	50.2	48.9
Gas++	6.2	10.1	10.6	12.2	12.8	13.3
Nuclear	6.1	11.8	15.3	16.2	16.4	16.5
Hydro	2.2	1.8	1.5	1.5	1.5	1.5
Others	1.2	1.3	1.3	1.3	1.3	1.3

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Primary Energy Supply

Total Primary Energy Supply by Energy Other East Asia

The chart displays the total primary energy supply in Mtoe for Other East Asia from 1980 to 2000. The supply grows from approximately 67 Mtoe in 1980 to nearly 300 Mtoe in 2000. Oil is the largest component, increasing from 48.6 Mtoe in 1980 to 144.1 Mtoe in 2000. Coal is the second largest, growing from 14.1 Mtoe to 76.2 Mtoe. Gas, Nuclear, Hydro, and Others also show significant growth over the period.

	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	14.1	39.3	51.4	61.5	71.9	76.2
Oil	48.6	77.0	129.9	142.2	142.9	144.1
Gas++	1.4	4.3	11.9	22.6	24.6	26.8
Nuclear	3.0	22.3	26.7	36.9	38.4	38.5
Hydro	0.3	0.8	1.2	1.3	1.2	1.1
Others	-0.0	-0.2	0.5	2.6	2.9	3.2
Total	67.3	143.6	221.7	267.1	281.9	289.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	20.9	27.4	23.2	23.0	25.5	26.3
Oil	72.2	53.7	58.6	53.2	50.7	49.7
Gas++	2.1	3.0	5.4	8.5	8.7	9.2
Nuclear	4.5	15.6	12.0	13.8	13.6	13.3
Hydro	0.4	0.5	0.6	0.5	0.4	0.4
Others	-0.0	-0.1	0.2	1.0	1.0	1.1

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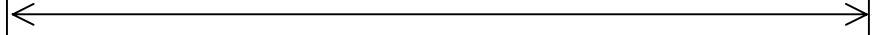
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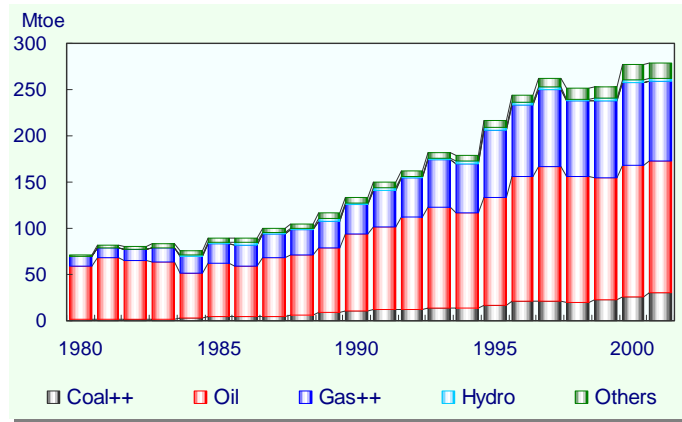
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Total Primary Energy Supply by Energy Southeast Asia



	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	0.9	10.2	16.6	23.4	25.2	30.9
Oil	58.3	84.1	116.1	130.7	143.3	141.8
Gas++	9.9	31.4	73.0	84.1	89.4	86.6
Nuclear	-	-	-	-	-	-
Hydro	0.9	2.2	2.8	2.7	2.6	2.7
Others	1.9	5.7	7.5	12.8	16.3	16.1
Total	71.8	133.7	216.0	253.7	276.9	278.2

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	1.3	7.7	7.7	9.2	9.1	11.1
Oil	81.1	62.9	53.8	51.5	51.8	51.0
Gas++	13.8	23.5	33.8	33.1	32.3	31.1
Nuclear	-	-	-	-	-	-
Hydro	1.2	1.7	1.3	1.1	1.0	1.0
Others	2.6	4.3	3.5	5.0	5.9	5.8

Primary Energy Supply

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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 2000. Coal remains the dominant source, followed by oil and gas. Hydro and other sources contribute smaller but stable portions of the total supply.

	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	27.5	36.3	40.0	49.5	47.2	46.4
Oil	34.9	37.2	40.7	44.3	42.1	39.5
Gas++	8.6	18.8	20.8	23.3	25.0	26.4
Nuclear	-	-	-	-	-	-
Hydro	2.9	3.3	3.8	3.5	3.6	3.4
Others	5.5	7.4	8.0	9.3	9.5	9.2
Total	79.4	103.0	113.3	129.9	127.5	124.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	34.7	35.3	35.3	38.1	37.1	37.2
Oil	44.0	36.1	35.9	34.1	33.0	31.6
Gas++	10.8	18.2	18.4	17.9	19.6	21.2
Nuclear	-	-	-	-	-	-
Hydro	3.6	3.2	3.4	2.7	2.8	2.7
Others	7.0	7.2	7.1	7.2	7.5	7.4

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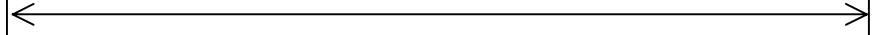
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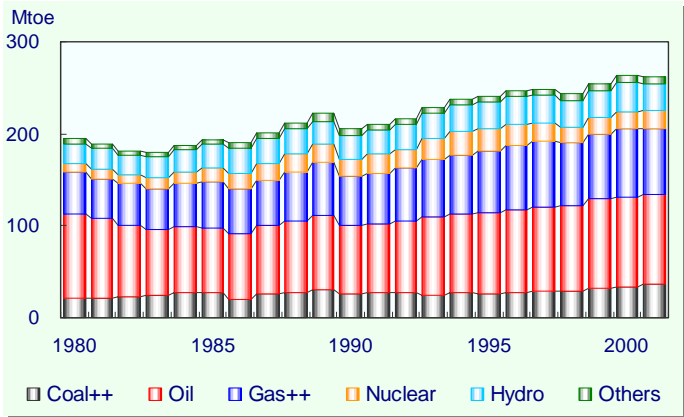
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Total Primary Energy Supply by Energy Canada



Primary Energy Supply

	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	21.3	26.3	26.5	32.5	33.4	35.9
Oil	90.9	73.8	88.0	96.5	97.1	97.6
Gas++	45.9	54.3	67.1	70.0	75.2	71.7
Nuclear	9.3	17.9	24.1	18.1	19.0	20.0
Hydro	21.8	25.5	28.9	29.4	30.8	28.6
Others	5.1	8.1	6.7	8.4	8.1	8.5
Total	194.2	206.0	241.2	254.9	263.5	262.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	11.0	12.8	11.0	12.8	12.7	13.7
Oil	46.8	35.8	36.5	37.9	36.8	37.2
Gas++	23.6	26.4	27.8	27.5	28.5	27.3
Nuclear	4.8	8.7	10.0	7.1	7.2	7.6
Hydro	11.2	12.4	12.0	11.5	11.7	10.9
Others	2.6	3.9	2.8	3.3	3.1	3.2

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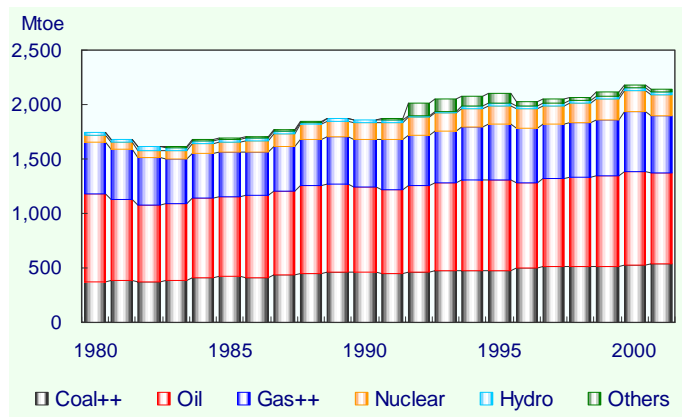
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Primary Energy Supply

Total Primary Energy Supply by Energy United States of America



	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	371.7	459.4	476.2	514.0	531.3	532.2
Oil	807.8	786.1	832.7	828.5	850.8	844.5
Gas++	473.4	435.4	506.3	520.7	547.5	516.4
Nuclear	65.4	150.3	175.5	189.8	196.4	200.3
Hydro	24.0	24.3	26.5	26.9	23.5	17.9
Others	6.3	8.1	87.3	33.6	33.5	33.6
Total	1,748.6	1,863.6	2,104.4	2,113.5	2,183.1	2,144.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	21.3	24.7	22.6	24.3	24.3	24.8
Oil	46.2	42.2	39.6	39.2	39.0	39.4
Gas++	27.1	23.4	24.1	24.6	25.1	24.1
Nuclear	3.7	8.1	8.3	9.0	9.0	9.3
Hydro	1.4	1.3	1.3	1.3	1.1	0.8
Others	0.4	0.4	4.1	1.6	1.5	1.6

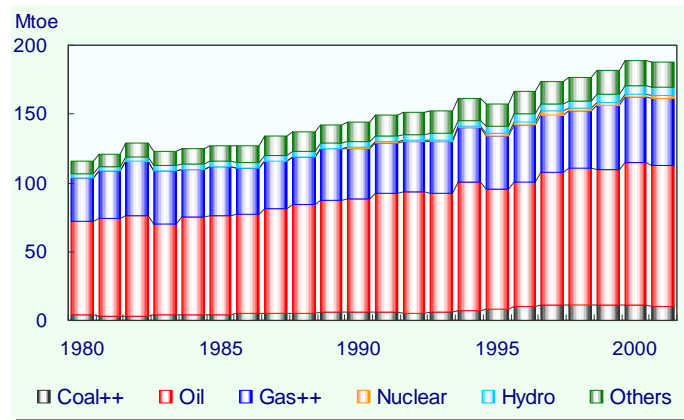
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Total Primary Energy Supply by Energy Latin America



Primary Energy Supply

	Mtoe					
	1980	1990	1995	1999	2000	2001
Coal++	3.9	6.2	8.1	11.0	10.7	10.6
Oil	68.1	81.8	87.3	99.2	104.4	102.0
Gas++	31.5	37.3	38.7	46.0	47.7	49.0
Nuclear	-	0.8	2.2	2.6	2.1	2.3
Hydro	2.7	3.7	5.1	5.4	5.9	6.1
Others	9.8	14.5	16.2	17.2	18.4	17.5
Total	115.9	144.2	157.5	181.3	189.2	187.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
Coal++	3.4	4.3	5.2	6.0	5.7	5.7
Oil	58.7	56.7	55.4	54.7	55.2	54.4
Gas++	27.2	25.9	24.6	25.4	25.2	26.1
Nuclear	-	0.5	1.4	1.4	1.1	1.2
Hydro	2.3	2.5	3.2	3.0	3.1	3.3
Others	8.4	10.1	10.3	9.5	9.7	9.3

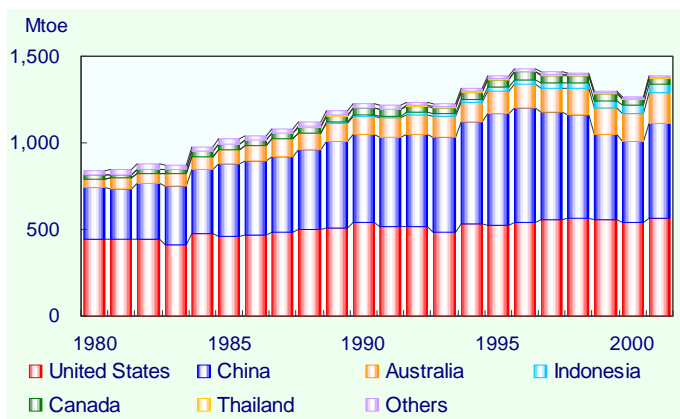
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Indigenous Production of Coal APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
United States	445.2	537.6	526.2	552.6	536.9	564.7
China	294.6	513.0	646.4	496.4	474.1	551.4
Australia	51.9	106.3	128.6	153.5	159.9	170.7
Indonesia	0.2	5.8	24.0	42.2	44.0	50.3
Canada	20.2	37.9	40.8	36.1	34.2	35.5
Thailand	0.4	3.6	5.5	5.8	5.2	5.7
Others	25.9	20.5	13.8	11.9	12.2	12.3
APEC 19	838.4	1,224.6	1,385.2	1,298.3	1,266.6	1,390.6

	Share (%)					
	1980	1990	1995	1999	2000	2001
United States	53.1	43.9	38.0	42.6	42.4	40.6
China	35.1	41.9	46.7	38.2	37.4	39.6
Australia	6.2	8.7	9.3	11.8	12.6	12.3
Indonesia	0.0	0.5	1.7	3.2	3.5	3.6
Canada	2.4	3.1	2.9	2.8	2.7	2.6
Thailand	0.0	0.3	0.4	0.4	0.4	0.4
Others	3.1	1.7	1.0	0.9	1.0	0.9

Coal: Hard Coal, Anthracite and Lignite

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Indigenous Production of Crude Oil APEC 19

Primary Energy Supply

	Mtoe					
	1980	1990	1995	1999	2000	2001
United States	490.8	424.8	355.4	309.7	307.7	305.9
Mexico	102.7	138.6	136.2	154.7	161.2	166.0
China	100.7	131.5	142.3	152.0	154.9	155.8
Canada	85.3	99.7	123.0	132.1	136.4	138.3
Indonesia	76.7	70.7	72.9	65.9	69.0	62.0
Malaysia	13.7	30.6	35.1	32.8	30.8	32.9
Others	44.9	51.3	51.0	48.7	54.9	56.9
APEC 19	914.8	947.3	915.9	896.0	914.9	917.6

	Share (%)					
	1980	1990	1995	1999	2000	2001
United States	53.7	44.8	38.8	34.6	33.6	33.3
Mexico	11.2	14.6	14.9	17.3	17.6	18.1
China	11.0	13.9	15.5	17.0	16.9	17.0
Canada	9.3	10.5	13.4	14.7	14.9	15.1
Indonesia	8.4	7.5	8.0	7.4	7.5	6.8
Malaysia	1.5	3.2	3.8	3.7	3.4	3.6
Others	4.9	5.4	5.6	5.4	6.0	6.2

Crude Oil includes NGL and condensate

APEC ENERGY HANDBOOK 2001

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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 countries from 1980 to 2001. The total production increases from approximately 603 Mtoe in 1980 to 850.3 Mtoe in 2001. The United States is the largest producer, followed by Canada, Mexico, and China. Other countries include Malaysia, Indonesia, and Others.

	Mtoe					
	1980	1990	1995	1999	2000	2001
United States	451.5	416.4	433.2	437.8	445.9	458.0
Canada	63.6	88.2	130.3	144.4	148.9	152.5
Malaysia	2.2	15.5	33.3	47.7	52.4	53.7
Indonesia	14.8	41.0	68.0	69.6	65.8	50.2
Mexico	35.1	35.3	36.1	44.9	43.1	41.8
China	12.0	12.8	15.0	21.1	22.8	25.4
Others	23.5	39.8	53.2	61.9	66.8	68.7
APEC 19	602.8	649.1	769.1	827.4	845.8	850.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
United States	74.9	64.2	56.3	52.9	52.7	53.9
Canada	10.6	13.6	16.9	17.5	17.6	17.9
Malaysia	0.4	2.4	4.3	5.8	6.2	6.3
Indonesia	2.5	6.3	8.8	8.4	7.8	5.9
Mexico	5.8	5.4	4.7	5.4	5.1	4.9
China	2.0	2.0	2.0	2.6	2.7	3.0
Others	3.9	6.1	6.9	7.5	7.9	8.1

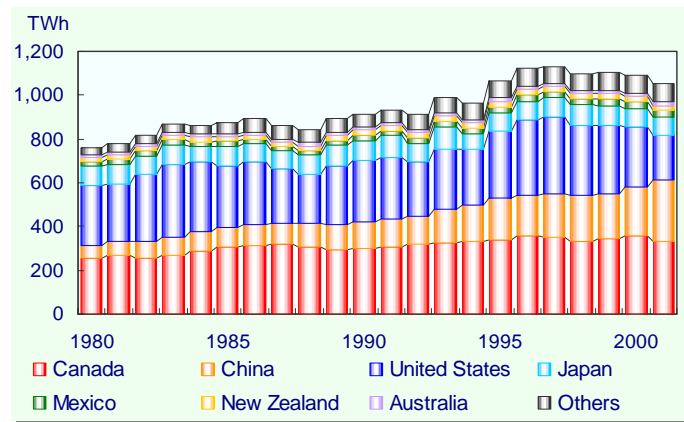
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Indigenous Production of Hydro Power APEC 19



	TWh					
	1980	1990	1995	1999	2000	2001
Canada	253.2	296.8	336.0	345.6	358.4	333.1
China	59.2	126.7	190.6	203.8	222.4	277.4
United States	276.0	279.9	308.4	313.4	273.1	208.1
Japan	91.0	91.0	82.8	88.4	83.1	82.1
Mexico	16.7	23.3	27.5	32.7	33.3	28.0
New Zealand	19.2	23.0	27.3	23.2	24.6	21.6
Australia	13.8	14.9	16.2	16.8	16.4	16.8
Others	29.2	59.6	78.9	77.9	81.1	85.0
APEC 19	758.4	915.3	1,067.8	1,101.8	1,092.5	1,052.2

	Share (%)					
	1980	1990	1995	1999	2000	2001
Canada	33.4	32.4	31.5	31.4	32.8	31.7
China	7.8	13.8	17.8	18.5	20.4	26.4
United States	36.4	30.6	28.9	28.4	25.0	19.8
Japan	12.0	9.9	7.8	8.0	7.6	7.8
Mexico	2.2	2.5	2.6	3.0	3.1	2.7
New Zealand	2.5	2.5	2.6	2.1	2.3	2.1
Australia	1.8	1.6	1.5	1.5	1.5	1.6
Others	3.9	6.5	7.4	7.1	7.4	8.1

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 2001. The y-axis represents TWh, ranging from 0 to 1,400. The x-axis shows years from 1980 to 2000. The bars are stacked by country: United States (red), Japan (blue), Korea (orange), Canada (light blue), Chinese Taipei (green), China (yellow), and Mexico (purple). The total production increases from approximately 380 TWh in 1980 to over 1,300 TWh by 2001.

	TWh					
	1980	1990	1995	1999	2000	2001
United States	251.1	576.9	673.4	728.3	753.9	768.8
Japan	82.6	195.8	286.9	317.7	305.5	306.8
Korea	3.5	52.9	67.0	103.1	109.0	112.1
Canada	35.9	68.8	92.3	69.3	72.8	76.7
Chinese Taipei	8.2	32.9	35.3	38.4	38.5	35.5
China	-	-	12.8	14.9	16.7	17.5
Mexico	-	2.9	8.4	10.0	8.2	8.8
Others	-	-	-	-	-	-
APEC 19	381.3	930.2	1,176.2	1,281.7	1,304.5	1,326.2

	Share (%)					
	1980	1990	1995	1999	2000	2001
United States	65.9	62.0	57.3	56.8	57.8	58.0
Japan	21.7	21.0	24.4	24.8	23.4	23.1
Korea	0.9	5.7	5.7	8.0	8.4	8.5
Canada	9.4	7.4	7.8	5.4	5.6	5.8
Chinese Taipei	2.2	3.5	3.0	3.0	3.0	2.7
China	-	-	1.1	1.2	1.3	1.3
Mexico	-	0.3	0.7	0.8	0.6	0.7
Others	-	-	-	-	-	-

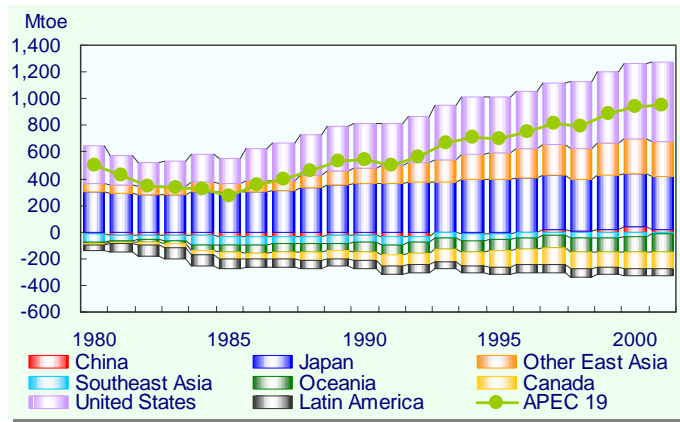
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Net Import by Region APEC 19



Primary Energy Supply

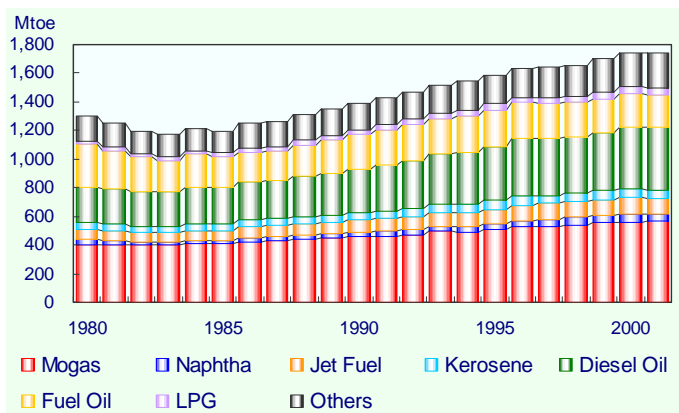
	Mtoe					
	1980	1990	1995	1999	2000	2001
Australia	-18.3	-65.3	-88.5	-105.7	-119.6	-133.8
Brunei Darussalam	-17.4	-12.9	-14.6	-14.3	-15.3	-15.1
Canada	-11.0	-68.4	-119.2	-120.1	-124.1	-124.0
Chile	4.1	7.0	10.7	17.8	16.2	15.2
China	-18.6	-29.0	-8.4	19.6	34.5	13.5
Hong Kong, China	6.0	10.8	14.3	20.3	18.2	19.2
Indonesia	-60.7	-65.9	-85.2	-92.2	-82.4	-74.2
Japan	303.2	361.6	394.0	406.7	406.8	406.4
Korea	29.6	69.5	130.8	150.6	162.7	163.5
Malaysia	-5.0	-25.9	-28.3	-28.7	-27.4	-26.1
Mexico	-46.9	-65.7	-62.9	-71.6	-71.6	-74.1
New Zealand	4.0	2.2	2.9	3.6	3.5	3.5
Papua New Guinea	0.6	-3.7	-4.0	-3.2	-0.9	-2.1
Peru	-3.0	-0.6	1.8	2.2	3.3	2.6
Philippines	10.4	11.4	16.9	19.5	20.0	20.2
Singapore	7.1	24.0	32.3	38.8	40.4	42.1
Chinese Taipei	19.4	37.0	55.7	71.3	76.4	77.8
Thailand	12.0	18.0	32.6	33.5	34.6	37.8
United States	288.6	334.8	419.3	533.8	568.7	592.4
APEC 19	504.2	538.9	700.1	881.8	944.2	944.8

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Transformation

Refining of Petroleum Products by Fuel APEC 19



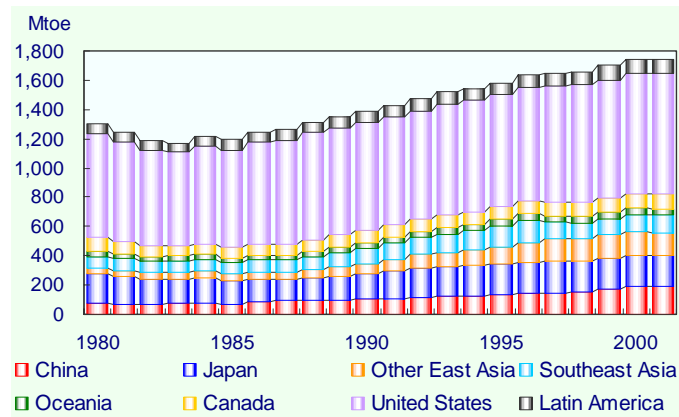
	Mtoe					
	1980	1990	1995	1999	2000	2001
Mogas	405.9	457.6	511.1	554.6	562.1	566.7
Naphtha	35.4	29.6	41.0	49.7	50.6	44.8
Jet Fuel	67.7	91.9	96.3	113.7	118.4	116.1
Kerosene	46.9	51.5	62.5	59.7	60.8	58.7
Diesel Oil	247.6	303.1	371.5	408.5	430.2	439.3
Fuel Oil	302.5	238.2	259.6	236.6	234.0	220.2
LPG	22.6	33.0	44.3	48.8	51.6	51.0
Others	171.0	187.7	196.3	228.4	234.0	242.1
Total	1,299.7	1,392.7	1,582.5	1,700.0	1,741.8	1,738.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
Mogas	31.2	32.9	32.3	32.6	32.3	32.6
Naphtha	2.7	2.1	2.6	2.9	2.9	2.6
Jet Fuel	5.2	6.6	6.1	6.7	6.8	6.7
Kerosene	3.6	3.7	3.9	3.5	3.5	3.4
Diesel Oil	19.0	21.8	23.5	24.0	24.7	25.3
Fuel Oil	23.3	17.1	16.4	13.9	13.4	12.7
LPG	1.7	2.4	2.8	2.9	3.0	2.9
Others	13.2	13.5	12.4	13.4	13.4	13.9

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Refining of Petroleum Products by Region APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
China	74.0	102.0	133.6	168.9	188.2	190.2
Japan	203.9	178.5	211.9	217.6	215.5	213.0
Other East Asia	41.2	62.5	117.8	155.7	160.6	156.4
Southeast Asia	76.2	109.3	142.2	112.8	115.6	117.0
Oceania	33.4	36.7	41.6	43.0	44.0	44.0
Canada	95.3	88.2	87.9	95.9	98.1	101.0
United States	714.9	738.6	769.5	806.8	821.3	821.7
Latin America	60.7	76.9	78.1	99.3	98.5	95.6
APEC 19	1,299.7	1,392.7	1,582.5	1,700.0	1,741.8	1,738.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
China	5.7	7.3	8.4	9.9	10.8	10.9
Japan	15.7	12.8	13.4	12.8	12.4	12.2
Other East Asia	3.2	4.5	7.4	9.2	9.2	9.0
Southeast Asia	5.9	7.8	9.0	6.6	6.6	6.7
Oceania	2.6	2.6	2.6	2.5	2.5	2.5
Canada	7.3	6.3	5.6	5.6	5.6	5.8
United States	55.0	53.0	48.6	47.5	47.2	47.3
Latin America	4.7	5.5	4.9	5.8	5.7	5.5

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 2001. Thermal power generation remains the dominant source, increasing from approximately 2,700 TWh in 1980 to nearly 6,000 TWh by 2001. Hydro power also shows significant growth, rising from about 750 TWh to over 1,000 TWh. Nuclear power generation begins to appear around 1990 and grows steadily. Geothermal and 'Others' (renewable energy) represent smaller but increasing shares of the total generation.

	TWh					
	1980	1990	1995	1999	2000	2001
Thermal	2,717.7	3,536.1	4,591.4	5,279.4	5,605.4	5,695.6
Hydro	758.4	915.3	1,067.8	1,101.8	1,092.5	1,052.2
Nuclear	381.3	930.2	1,176.2	1,281.7	1,304.5	1,326.2
Geothermal	10.3	23.8	33.6	41.3	42.9	42.0
Others	6.3	16.7	25.0	89.5	96.5	103.6
Total	3,874.0	5,422.2	6,894.0	7,793.7	8,141.9	8,219.6

	Share (%)					
	1980	1990	1995	1999	2000	2001
Thermal	70.2	65.2	66.6	67.7	68.8	69.3
Hydro	19.6	16.9	15.5	14.1	13.4	12.8
Nuclear	9.8	17.2	17.1	16.4	16.0	16.1
Geothermal	0.3	0.4	0.5	0.5	0.5	0.5
Others	0.2	0.3	0.4	1.1	1.2	1.3

"Others" comprises power generated from renewable energy.

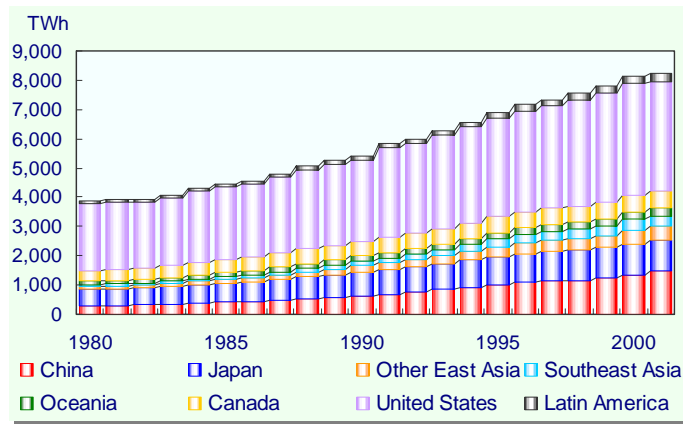
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APEC ENERGY HANDBOOK 2001

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Electricity Power Generation by Region APEC 19



	TWh					
	1980	1990	1995	1999	2000	2001
China	301.6	621.2	1,007.7	1,239.3	1,355.6	1,471.7
Japan	566.0	833.6	962.1	1,040.3	1,054.4	1,049.9
Other East Asia	83.4	202.8	335.5	417.0	460.0	482.8
Southeast Asia	59.6	147.6	266.5	340.3	373.9	364.7
Oceania	118.2	185.2	210.1	242.0	242.9	251.1
Canada	375.0	477.9	554.5	573.9	605.2	587.7
United States	2,286.4	2,808.2	3,370.4	3,702.5	3,797.9	3,756.0
Latin America	83.7	145.8	187.2	238.4	252.0	255.8
APEC 19	3,874.0	5,422.2	6,894.0	7,793.7	8,141.9	8,219.6

	Share (%)					
	1980	1990	1995	1999	2000	2001
China	7.8	11.5	14.6	15.9	16.6	17.9
Japan	14.6	15.4	14.0	13.3	13.0	12.8
Other East Asia	2.2	3.7	4.9	5.4	5.6	5.9
Southeast Asia	1.5	2.7	3.9	4.4	4.6	4.4
Oceania	3.1	3.4	3.0	3.1	3.0	3.1
Canada	9.7	8.8	8.0	7.4	7.4	7.1
United States	59.0	51.8	48.9	47.5	46.6	45.7
Latin America	2.2	2.7	2.7	3.1	3.1	3.1

Transformation

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Transformation

Power Generation Capacity by Type APEC 19

The chart displays the cumulative power generation capacity in GW for APEC 19 from 1980 to 2001. The y-axis ranges from 0 to 2,000 GW. The x-axis shows years from 1980 to 2000. The bars are stacked by type: Thermal (red), Hydro (blue), Nuclear (yellow), and Others (green). The total capacity grows from approximately 958 GW in 1980 to 1,819.5 GW in 2001.

	1980	1990	1995	1999	2000	GW 2001
Thermal	676.2	860.1	1,056.6	1,174.9	1,239.7	1,292.1
Hydro	204.9	259.8	304.5	327.1	335.0	339.3
Nuclear	75.2	157.8	174.1	180.9	180.8	182.2
Others	1.9	5.2	9.3	9.3	11.2	5.9
Total	958.2	1,282.8	1,544.5	1,692.1	1,766.6	1,819.5

	1980	1990	1995	1999	2000	Share (%) 2001
Thermal	70.6	67.0	68.4	69.4	70.2	71.0
Hydro	21.4	20.3	19.7	19.3	19.0	18.6
Nuclear	7.9	12.3	11.3	10.7	10.2	10.0
Others	0.2	0.4	0.6	0.5	0.6	0.3

"Others" comprises power generated from renewable energy.

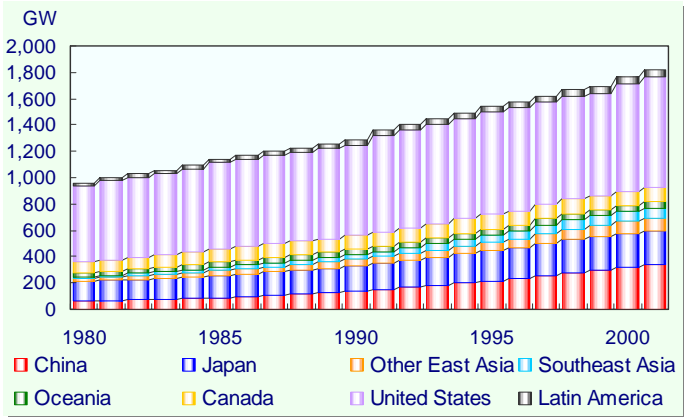
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APEC ENERGY HANDBOOK 2001

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Power Generation Capacity by Region APEC 19



	GW					
	1980	1990	1995	1999	2000	2001
China	65.9	137.9	217.2	298.8	319.3	338.0
Japan	143.7	194.7	227.0	253.5	258.8	261.7
Other East Asia	21.8	46.2	64.2	84.0	87.4	89.9
Southeast Asia	15.0	34.5	55.4	71.9	75.2	79.0
Oceania	30.6	42.6	46.5	50.1	51.6	53.0
Canada	82.0	102.9	115.5	105.9	102.5	107.2
United States	578.6	690.5	775.6	776.6	818.6	836.8
Latin America	20.7	33.5	43.1	51.3	53.1	53.9
APEC 19	958.2	1,282.8	1,544.5	1,692.1	1,766.6	1,819.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
China	6.9	10.7	14.1	17.7	18.1	18.6
Japan	15.0	15.2	14.7	15.0	14.7	14.4
Other East Asia	2.3	3.6	4.2	5.0	4.9	4.9
Southeast Asia	1.6	2.7	3.6	4.2	4.3	4.3
Oceania	3.2	3.3	3.0	3.0	2.9	2.9
Canada	8.6	8.0	7.5	6.3	5.8	5.9
United States	60.4	53.8	50.2	45.9	46.3	46.0
Latin America	2.2	2.6	2.8	3.0	3.0	3.0

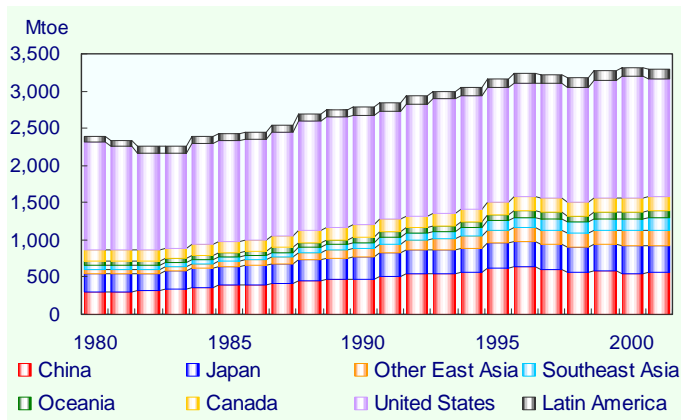
Transformation

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Final Energy Consumption

Total Final Energy Consumption by Region APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
China	301.4	469.3	617.8	575.6	554.8	569.0
Japan	252.7	305.1	339.9	359.9	360.0	353.8
Other East Asia	56.2	108.8	167.1	197.7	205.3	211.3
Southeast Asia	47.0	82.0	127.8	149.7	157.8	161.9
Oceania	59.3	74.0	83.5	90.3	93.9	93.7
Canada	156.7	164.6	178.4	188.6	191.6	185.2
United States	1,434.3	1,475.2	1,539.3	1,581.0	1,631.5	1,592.2
Latin America	79.5	101.7	114.4	123.5	125.2	121.3
APEC 19	2,387.1	2,780.8	3,168.2	3,266.3	3,320.1	3,288.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
China	12.6	16.9	19.5	17.6	16.7	17.3
Japan	10.6	11.0	10.7	11.0	10.8	10.8
Other East Asia	2.4	3.9	5.3	6.1	6.2	6.4
Southeast Asia	2.0	3.0	4.0	4.6	4.8	4.9
Oceania	2.5	2.7	2.6	2.8	2.8	2.8
Canada	6.6	5.9	5.6	5.8	5.8	5.6
United States	60.1	53.1	48.6	48.4	49.1	48.4
Latin America	3.3	3.7	3.6	3.8	3.8	3.7

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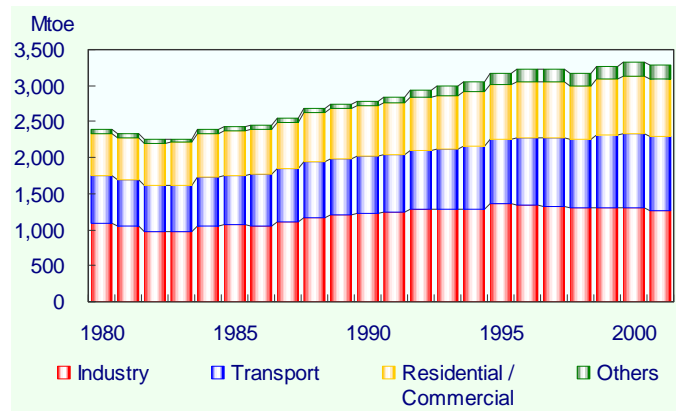
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Total Final Energy Consumption by Sector APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	1,085.7	1,227.4	1,351.7	1,304.7	1,309.4	1,264.2
Transport	655.1	797.8	902.3	1,010.9	1,026.8	1,031.1
Residential / Commercial	585.0	688.0	768.6	767.4	799.5	798.2
Others	61.2	67.5	145.7	183.3	184.4	195.1
Total	2,387.1	2,780.8	3,168.2	3,266.3	3,320.1	3,288.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	45.5	44.1	42.7	39.9	39.4	38.4
Transport	27.4	28.7	28.5	30.9	30.9	31.4
Residential / Commercial	24.5	24.7	24.3	23.5	24.1	24.3
Others	2.6	2.4	4.6	5.6	5.6	5.9

Final Energy Consumption

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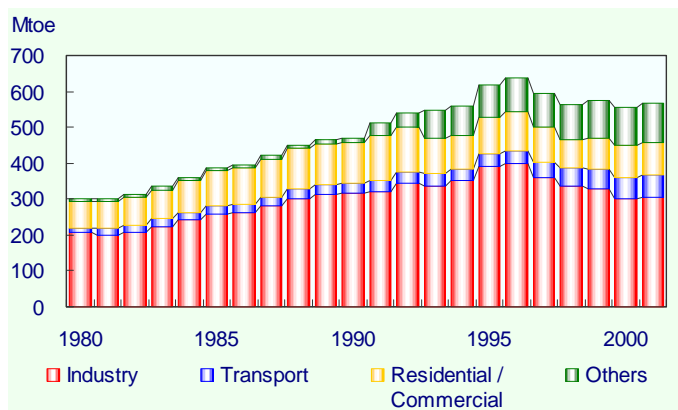
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Final Energy Consumption

Total Final Energy Consumption by Sector China



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	205.7	316.8	390.8	326.7	301.8	305.4
Transport	14.2	27.3	34.6	55.1	59.2	61.0
Residential / Commercial	71.9	112.1	102.0	87.8	88.3	91.7
Others	9.6	13.1	90.3	106.0	105.5	110.8
Total	301.4	469.3	617.8	575.6	554.8	569.0

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	68.2	67.5	63.3	56.7	54.4	53.7
Transport	4.7	5.8	5.6	9.6	10.7	10.7
Residential / Commercial	23.8	23.9	16.5	15.3	15.9	16.1
Others	3.2	2.8	14.6	18.4	19.0	19.5

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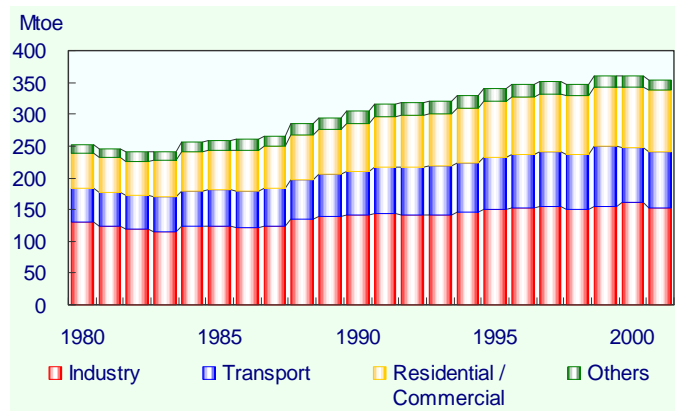
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Total Final Energy Consumption by Sector Japan



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	131.4	140.8	150.4	155.5	160.8	153.6
Transport	52.3	70.1	81.3	94.0	86.9	86.6
Residential / Commercial	54.2	74.7	89.2	93.2	95.5	96.9
Others	14.8	19.6	19.0	17.1	16.8	16.8
Total	252.7	305.1	339.9	359.9	360.0	353.8

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	52.0	46.1	44.2	43.2	44.7	43.4
Transport	20.7	23.0	23.9	26.1	24.1	24.5
Residential / Commercial	21.5	24.5	26.2	25.9	26.5	27.4
Others	5.8	6.4	5.6	4.8	4.7	4.7

Final Energy Consumption

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Final Energy Consumption

Total Final Energy Consumption by Sector Other East Asia

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	26.9	50.4	79.4	97.3	101.6	105.7
Transport	9.4	23.5	41.6	46.9	48.0	48.6
Residential / Commercial	16.4	29.7	39.1	44.1	45.8	47.1
Others	3.6	5.2	7.1	9.3	9.9	10.0
Total	56.2	108.8	167.1	197.7	205.3	211.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	47.8	46.3	47.5	49.2	49.5	50.0
Transport	16.7	21.6	24.9	23.7	23.4	23.0
Residential / Commercial	29.1	27.3	23.4	22.3	22.3	22.3
Others	6.5	4.8	4.3	4.7	4.8	4.7

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APEC ENERGY HANDBOOK 2001

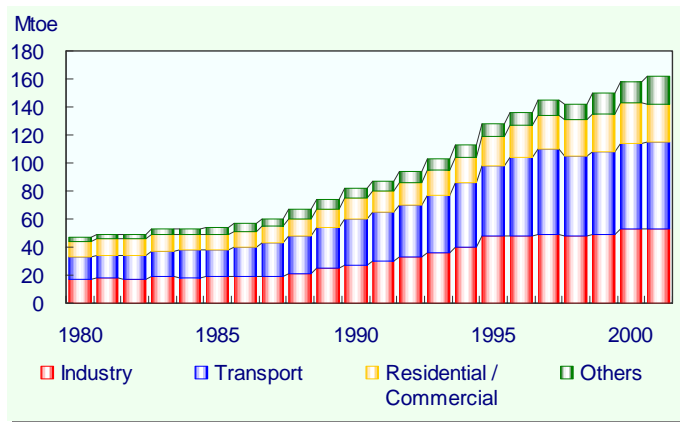
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Total Final Energy Consumption by Sector Southeast Asia



Final Energy Consumption

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	17.4	27.4	47.6	48.9	52.9	52.8
Transport	15.8	32.9	50.7	59.3	61.0	62.6
Residential / Commercial	10.4	14.3	20.7	26.8	29.0	26.7
Others	3.4	7.5	8.9	14.8	14.8	19.9
Total	47.0	82.0	127.8	149.7	157.8	161.9

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	36.9	33.4	37.2	32.6	33.5	32.6
Transport	33.6	40.0	39.7	39.6	38.7	38.7
Residential / Commercial	22.2	17.5	16.2	17.9	18.4	16.5
Others	7.3	9.1	6.9	9.9	9.4	12.3

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Final Energy Consumption

Total Final Energy Consumption by Sector Oceania

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	25.9	31.2	34.5	36.4	37.3	37.1
Transport	20.0	25.7	29.2	32.1	33.8	33.9
Residential / Commercial	10.5	13.1	14.7	16.2	16.7	17.0
Others	2.9	4.0	5.1	5.7	6.1	5.6
Total	59.3	74.0	83.5	90.3	93.9	93.7

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	43.6	42.1	41.3	40.3	39.7	39.6
Transport	33.8	34.8	35.0	35.5	36.0	36.2
Residential / Commercial	17.7	17.7	17.6	17.9	17.8	18.2
Others	4.9	5.4	6.1	6.3	6.5	6.0

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APEC ENERGY HANDBOOK 2001

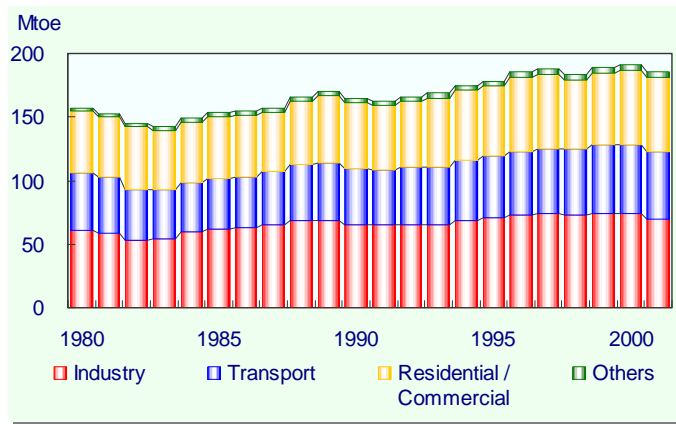
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Total Final Energy Consumption by Sector Canada



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	61.1	65.6	70.4	74.0	74.1	69.5
Transport	45.0	44.2	48.7	54.5	53.8	53.1
Residential / Commercial	48.2	51.3	55.3	55.7	59.2	58.7
Others	2.4	3.5	4.1	4.4	4.5	4.0
Total	156.7	164.6	178.4	188.6	191.6	185.2

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	39.0	39.9	39.4	39.2	38.7	37.5
Transport	28.7	26.9	27.3	28.9	28.1	28.6
Residential / Commercial	30.7	31.2	31.0	29.5	30.9	31.7
Others	1.6	2.1	2.3	2.3	2.3	2.2

Final Energy Consumption

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Final Energy Consumption

Total Final Energy Consumption by Sector United States of America

The chart shows a general upward trend in total energy consumption from 1980 to 2001. The Industrial sector (red) shows a steady decline from approximately 600 Mtoe in 1980 to 500 Mtoe in 2001. The Transport sector (blue) shows a significant increase from about 400 Mtoe in 1980 to 638 Mtoe in 2001. Residential and Commercial sectors (yellow) also show growth, increasing from around 350 Mtoe in 1980 to 433 Mtoe in 2001. The 'Others' category (green) remains very small, around 10-20 Mtoe.

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	594.2	563.7	541.6	527.7	542.1	504.0
Transport	470.3	537.7	574.6	622.4	635.5	638.4
Residential / Commercial	356.9	371.4	422.7	417.7	438.1	432.8
Others	12.9	2.4	0.4	13.3	15.7	17.0
Total	1,434.3	1,475.2	1,539.3	1,581.0	1,631.5	1,592.2

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	41.4	38.2	35.2	33.4	33.2	31.7
Transport	32.8	36.5	37.3	39.4	39.0	40.1
Residential / Commercial	24.9	25.2	27.5	26.4	26.9	27.2
Others	0.9	0.2	0.0	0.8	1.0	1.1

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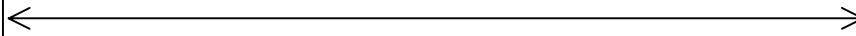
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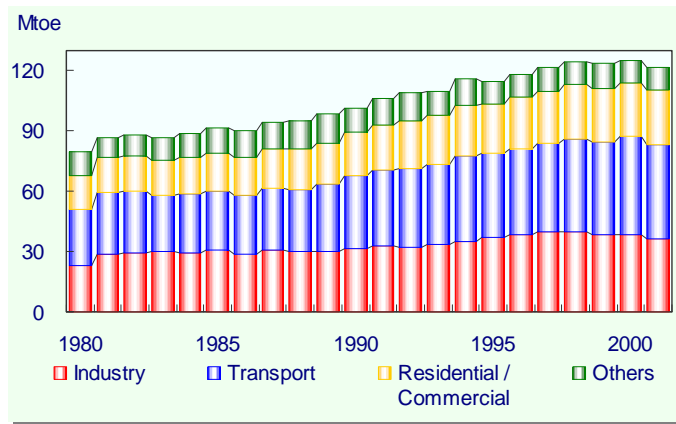
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Total Final Energy Consumption by Sector Latin America



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	23.3	31.4	37.2	38.2	38.7	36.2
Transport	28.0	36.4	41.6	46.7	48.6	46.8
Residential / Commercial	16.6	21.5	24.9	25.9	26.8	27.3
Others	11.6	12.4	10.7	12.7	11.1	11.0
Total	79.5	101.7	114.4	123.5	125.2	121.3

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	29.3	30.9	32.5	30.9	30.9	29.8
Transport	35.2	35.8	36.4	37.8	38.8	38.6
Residential / Commercial	20.9	21.1	21.8	21.0	21.4	22.5
Others	14.6	12.2	9.4	10.3	8.9	9.1

Final Energy Consumption

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Final Energy Consumption

Coal++ Demand by Sector APEC 19

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	295.8	371.6	426.9	351.6	332.3	323.3
Transport	9.6	10.6	6.8	5.7	4.8	4.5
Residential / Commercial	79.2	110.5	82.0	49.9	44.9	44.8
Others	9.6	0.9	29.3	20.1	18.6	20.1
Total	394.2	493.5	545.0	427.3	400.6	392.7

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	75.0	75.3	78.3	82.3	82.9	82.3
Transport	2.4	2.1	1.2	1.3	1.2	1.1
Residential / Commercial	20.1	22.4	15.1	11.7	11.2	11.4
Others	2.4	0.2	5.4	4.7	4.6	5.1

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APEC ENERGY HANDBOOK 2001

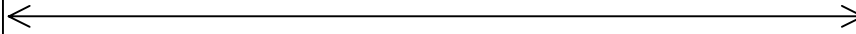
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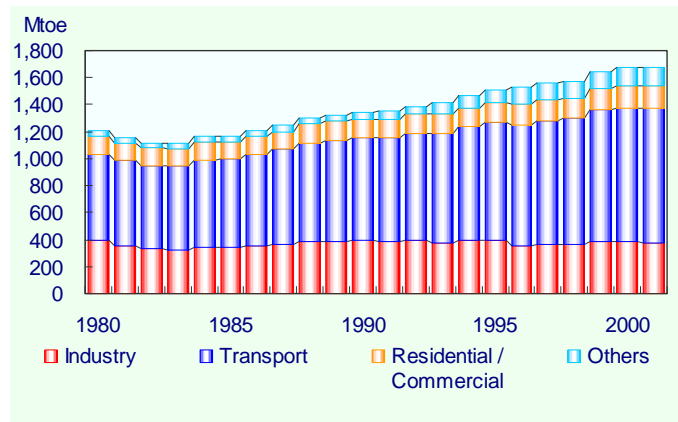
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Oil Demand by Sector APEC 19



	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	399.6	392.4	396.0	382.6	382.0	374.0
Transport	626.9	765.2	869.3	979.1	996.1	1,001.1
Residential / Commercial	143.9	132.6	147.5	156.1	161.7	159.8
Others	40.6	52.8	95.7	129.4	130.7	136.6
Total	1,211.1	1,343.0	1,508.4	1,647.3	1,670.6	1,671.5

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	33.0	29.2	26.3	23.2	22.9	22.4
Transport	51.8	57.0	57.6	59.4	59.6	59.9
Residential / Commercial	11.9	9.9	9.8	9.5	9.7	9.6
Others	3.4	3.9	6.3	7.9	7.8	8.2

Final Energy Consumption

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Final Energy Consumption

Gas++ Demand by Sector APEC 19

The chart illustrates the growth of gas demand in APEC 19 from 1980 to 2001. The total demand increases from approximately 455 Mtoe in 1980 to 558.7 Mtoe in 2001. The Industrial sector remains the largest consumer, followed by Residential/Commercial, Transport, and Others.

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	235.4	251.7	255.2	288.3	306.4	284.6
Transport	16.4	18.4	21.6	20.8	20.4	19.7
Residential / Commercial	197.0	201.0	231.2	233.8	248.2	241.0
Others	6.4	6.9	7.6	12.9	12.0	13.4
Total	455.2	478.0	515.6	555.9	587.0	558.7

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	51.7	52.7	49.5	51.9	52.2	50.9
Transport	3.6	3.9	4.2	3.7	3.5	3.5
Residential / Commercial	43.3	42.0	44.8	42.1	42.3	43.1
Others	1.4	1.4	1.5	2.3	2.0	2.4

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APEC ENERGY HANDBOOK 2001

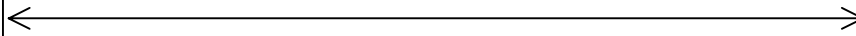
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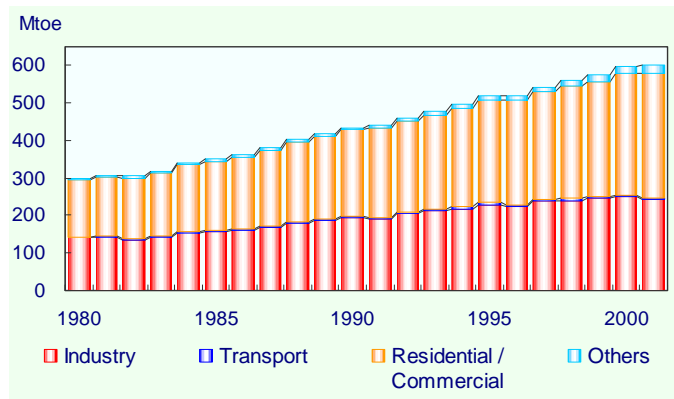
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Electricity Demand by Sector APEC 19



Final Energy Consumption

	Mtoe					
	1980	1990	1995	1999	2000	2001
Industry	140.4	193.8	229.4	245.3	249.7	242.6
Transport	2.2	3.6	4.6	5.1	5.4	5.7
Residential / Commercial	153.8	231.3	274.7	307.0	323.0	330.8
Others	3.9	6.4	11.8	18.3	19.3	21.4
Total	300.3	435.1	520.5	575.6	597.4	600.4

	Share (%)					
	1980	1990	1995	1999	2000	2001
Industry	46.8	44.5	44.1	42.6	41.8	40.4
Transport	0.7	0.8	0.9	0.9	0.9	0.9
Residential / Commercial	51.2	53.2	52.8	53.3	54.1	55.1
Others	1.3	1.5	2.3	3.2	3.2	3.6

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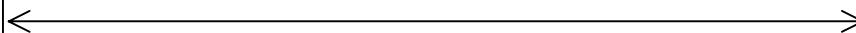
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APEC 21, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,513,261	-	1,281,168	61,406	1,320,607
2 Import	231,577	2,386	1,126,527	311,830	204,414
3 Export	-279,523	-12,350	-436,398	-273,012	-301,707
4 International Marine Bunkers	-	-	-	-68,786	-
5 Stock Change	-5,825	-1,550	-11,143	-10,725	-26,724
6 Total Primary Energy Supply	1,459,489	-11,513	1,960,154	20,713	1,196,589
7 Public Electricity	-927,082	-5,218	-23,989	-99,067	-295,837
8 Autoproducers of Electricity	-116,826	-7,343	-12,535	-27,105	-181,213
9 Gas Processing	-5,512	20,148	457	-9,555	-34,908
10 Petroleum Refineries	-	-	-1,902,101	1,895,209	-36,975
11 Coal Transformation	-182,595	176,277	-	-760	-10
12 Loss & Own Use	-22,068	-4,298	-11,222	-124,626	-58,790
13 Discrepancy	75,322	-2,548	13,161	85,319	42,023
14 Total Final Energy Consumption	280,728	165,505	23,926	1,740,128	630,880
15 Industry Sector	212,812	152,933	543	385,389	291,802
16 Transport Sector	4,720	76	179	1,042,156	46,736
17 Other Sector	58,363	7,420	603	234,563	262,494
17.1 Agriculture	7,153	845	11	45,219	974
17.2 Residential & Commercial	47,668	6,387	505	167,771	260,653
17.3 Other	3,542	188	88	21,573	866
18 Non-energy	3,867	5,066	22,569	53,513	29,511

Australia, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	170,731	-	32,495	1,005	29,772
2 Import	-	0	23,133	3,863	-
3 Export	-125,196	-11	-19,205	-7,602	-8,805
4 International Marine Bunkers	-	-	-	-776	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	45,535	-11	36,422	-3,511	20,967
7 Public Electricity	-40,611	-63	-	-219	-2,755
8 Autoproducers of Electricity	-367	-13	-	-339	-2,094
9 Gas Processing	-	491	-	-24	-14
10 Petroleum Refineries	-	-	-38,043	39,070	-374
11 Coal Transformation	-3,154	2,857	-	-24	-
12 Loss & Own Use	-	-	-	-2,041	-509
13 Discrepancy	1,158	-176	1,632	4,812	232
14 Total Final Energy Consumption	2,561	3,085	11	37,723	15,453
15 Industry Sector	2,421	3,044	11	5,977	11,412
16 Transport Sector	111	-	-	28,335	331
17 Other Sector	29	41	-	2,058	3,710
17.1 Agriculture	-	-	-	1,386	0
17.2 Residential & Commercial	29	41	-	672	3,709
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	1,353	-



Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	107,822	384,994	39,343	58,416	-	-	4,767,017
-	-	-	-	-	6,975	-	1,883,709
-	-	-	-	-1,468	-8,202	-	-1,312,660
-	-	-	-	-	-	-	-68,786
-	-	-	-	-35	-	-	-56,002
-	107,822	384,994	39,343	56,913	-1,227	-	5,213,277
-198	-103,180	-323,713	-24,230	-5,125	665,368	93,838	-1,048,434
-337	-4,674	-61,274	-13,518	-21,232	122,744	89,582	-233,730
40,606	-	-	-	-52	-13	-	11,171
-	-	-	-	-	-178	-	-44,044
-	-	-	-	-	-8	-	-7,096
-1,763	-	-	-143	-3	-79,344	-26,166	-328,421
6,822	33	-7	0	4,326	-51,468	8,707	181,689
45,130	-	-	1,452	34,827	655,875	165,960	3,744,411
19,350	-	-	251	18,443	271,151	71,400	1,424,076
11	-	-	-	-	11,113	3,714	1,108,706
25,769	-	-	1,201	14,086	368,488	90,846	1,063,833
20	-	-	96	563	12,046	4,034	70,961
25,727	-	-	1,105	13,158	344,386	79,590	946,950
22	-	-	-	364	12,056	7,222	45,922
-	-	-	-	2,251	-	-	116,777

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,443	-	105	4,829	-	-	240,380
-	-	-	-	-	-	-	26,996
-	-	-	-	-	-	-	-160,820
-	-	-	-	-	-	-	-776
-	-	-	-	-	-	-	-
-	1,443	-	105	4,829	-	-	105,780
-	-1,443	-	-	-2,464	17,037	-	-30,518
-	-	-	-	-122	923	-	-2,013
23	-	-	-	-	-	-	476
-	-	-	-	-	-143	-	510
-	-	-	-	-	-7	-	-329
-1	-	-	-	-	-2,458	-	-5,009
44	-	-	0	2,689	634	-	11,026
66	-	-	105	4,932	15,985	-	79,922
49	-	-	-	3,017	7,524	-	33,455
-	-	-	-	-	209	-	28,985
17	-	-	105	1,916	8,253	-	16,129
-	-	-	-	-	251	-	1,637
17	-	-	105	1,916	8,003	-	14,492
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,353

Energy Balances

Brunei Darussalam, 2001

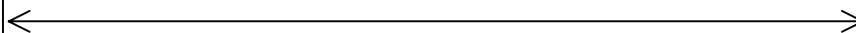
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	9,072	-	8,448
2 Import	-	-	-	8	-
3 Export	-	-	-8,475	-0	-6,611
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-32	1	10
6 Total Primary Energy Supply	-	-	565	10	1,847
7 Public Electricity	-	-	-	-	-753
8 Autoproducers of Electricity	-	-	-	-	-666
9 Gas Processing	-	-	-	12	-417
10 Petroleum Refineries	-	-	-569	390	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-33	-240
13 Discrepancy	-	-	4	16	254
14 Total Final Energy Consumption	-	-	-	395	26
15 Industry Sector	-	-	-	33	-
16 Transport Sector	-	-	-	328	-
17 Other Sector	-	-	-	14	26
17.1 Agriculture	-	-	-	0	-
17.2 Residential & Commercial	-	-	-	14	26
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	8	-

Canada, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	35,501	-	138,301	-	152,457
2 Import	19,793	404	47,930	10,053	3,202
3 Export	-18,595	-51	-76,934	-19,206	-88,573
4 International Marine Bunkers	-	-	-	-1,162	-
5 Stock Change	-1,134	-60	-893	-513	4,626
6 Total Primary Energy Supply	35,564	293	108,403	-10,828	71,712
7 Public Electricity	-22,706	-	-	-3,156	-5,794
8 Autoproducers of Electricity	-2	-77	-	-383	-1,387
9 Gas Processing	-	638	-	-	-
10 Petroleum Refineries	-	-	-106,554	101,016	-
11 Coal Transformation	-3,491	2,752	-	-	-
12 Loss & Own Use	-198	-	-	-9,215	-12,013
13 Discrepancy	-8,056	-751	-1,848	267	-2,656
14 Total Final Energy Consumption	1,112	2,854	-	77,700	49,861
15 Industry Sector	1,075	2,854	-	15,810	21,736
16 Transport Sector	-	-	-	48,339	4,351
17 Other Sector	37	-	-	13,383	23,774
17.1 Agriculture	-	-	-	2,535	501
17.2 Residential & Commercial	37	-	-	10,849	23,272
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	168	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	17,519
-	-	-	-	-	-	-	8
-	-	-	-	-	-	-	-15,086
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-20
-	-	-	-	-	-	-	2,422
-	-	-	-	-	222	-	-531
-	-	-	-	-	28	-	-637
-	-	-	-	-	-	-	-405
-	-	-	-	-	-	-	-178
-	-	-	-	-	-	-	-
-	-	-	-	-	-36	-	-309
-	-	-	-	-	-0	-	274
-	-	-	-	-	214	-	635
-	-	-	-	-	52	-	84
-	-	-	-	-	-	-	328
-	-	-	-	-	163	-	203
-	-	-	-	-	-	-	0
-	-	-	-	-	163	-	203
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	8

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	28,645	19,984	17	10,462	-	-	385,366
-	-	-	-	-	1,386	-	82,768
-	-	-	-	-	-3,374	-	-206,734
-	-	-	-	-	-	-	-1,162
-	-	-	-	-	-	-	2,025
-	28,645	19,984	17	10,462	-1,989	-	262,263
-	-26,137	-19,984	-10	-	46,657	-	-31,130
-	-2,508	-	-7	-668	3,872	825	-336
-	-	-	-	-	-	-	638
-	-	-	-	-	-	-	-5,539
-	-	-	-	-	-	-	-739
-	-	-	-	-	-5,405	-	-26,830
-	-	-	-	0	-43	-	-13,088
-	-	-	-	9,794	43,093	825	185,239
-	-	-	-	7,956	19,202	825	69,459
-	-	-	-	-	370	-	53,061
-	-	-	-	1,837	23,521	-	62,552
-	-	-	-	-	833	-	3,869
-	-	-	-	1,837	22,688	-	58,683
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	168

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Chile, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	383	-	268	641	2,170
2 Import	1,884	43	9,988	1,518	4,393
3 Export	-	-	-	-1,292	-
4 International Marine Bunkers	-	-	-	-965	-
5 Stock Change	127	-23	-228	199	-413
6 Total Primary Energy Supply	2,394	20	10,028	100	6,151
7 Public Electricity	-1,259	-130	-	-68	-2,149
8 Autoproducers of Electricity	-11	-	-	-121	-88
9 Gas Processing	-474	-82	-	-1	-2,303
10 Petroleum Refineries	-	-	-10,028	9,941	-429
11 Coal Transformation	-	480	-	-	-
12 Loss & Own Use	-	-57	-	-619	-
13 Discrepancy	0	76	0	680	-63
14 Total Final Energy Consumption	650	306	-	9,913	1,120
15 Industry Sector	551	301	-	2,077	704
16 Transport Sector	-	-	-	5,399	10
17 Other Sector	100	5	-	1,368	406
17.1 Agriculture	99	5	-	142	29
17.2 Residential & Commercial	1	-	-	1,226	377
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	104	-

China, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	551,385	-	155,764	-	25,413
2 Import	1,309	-	57,248	26,894	-
3 Export	-44,202	-8,944	-7,173	-10,912	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	17,755	-1,828	-1,235	-1,291	-
6 Total Primary Energy Supply	526,245	-10,772	204,604	14,691	25,413
7 Public Electricity	-305,242	-683	-892	-14,439	-2,464
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-5,038	555	-	-	-
10 Petroleum Refineries	-	-	-193,868	190,249	-
11 Coal Transformation	-92,888	89,413	-	-	-
12 Loss & Own Use	-21,738	-1,207	-5,368	-37,150	-6,136
13 Discrepancy	57,083	1,892	-3,749	32,210	1,889
14 Total Final Energy Consumption	158,422	79,196	726	185,560	18,702
15 Industry Sector	105,805	68,055	509	41,582	9,528
16 Transport Sector	4,284	71	173	53,557	101
17 Other Sector	44,900	6,388	13	54,187	4,174
17.1 Agriculture	6,521	840	-	15,217	-
17.2 Residential & Commercial	35,221	5,364	1	19,909	4,115
17.3 Other	3,158	184	11	19,061	59
18 Non-energy	3,433	4,683	-	32,830	4,900

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,813	-	-	5,775	-	-	11,049
-	-	-	-	-	119	-	17,946
-	-	-	-	-1,468	-	-	-2,760
-	-	-	-	-	-	-	-965
-	-	-	-	-11	-	-	-349
-	1,813	-	-	4,296	119	-	24,921
-	-1,813	-	-	-166	3,396	-	-2,190
-	-51	-	-	-460	262	-	-469
132	-	-	-	-52	-13	-	-2,793
-	-	-	-	-	-34	-	-550
-	-	-	-	-	-1	-	479
-15	-	-	-	-3	-342	-	-1,036
7	51	-	-	189	-0	-	942
125	-	-	-	3,803	3,386	-	19,304
87	-	-	-	345	2,018	-	6,083
-	-	-	-	-	20	-	5,429
38	-	-	-	3,411	1,348	-	6,675
-	-	-	-	563	321	-	1,159
38	-	-	-	2,848	1,027	-	5,517
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	104

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	23,867	4,553	-	2,138	-	-	763,120
-	-	-	-	-	155	-	85,606
-	-	-	-	-	-877	-	-72,109
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	13,400
-	23,867	4,553	-	2,138	-722	-	790,018
-	-23,867	-4,553	-	-	126,607	36,570	-188,965
-	-	-	-	-	-	-	-
2,999	-	-	-	-	-	-	-1,484
-	-	-	-	-	-	-	-3,619
-	-	-	-	-	-	-	-3,475
-927	-	-	-	-	-28,138	-9,331	-109,997
6,511	-	-	-	-	-8,884	-467	86,484
8,583	-	-	-	2,138	88,863	26,771	568,961
6,987	-	-	-	-	52,826	20,116	305,408
5	-	-	-	-	2,661	164	61,015
1,591	-	-	-	-	32,145	6,491	149,889
-	-	-	-	-	6,564	13	29,155
1,569	-	-	-	-	19,657	5,856	91,693
22	-	-	-	-	5,924	622	29,041
-	-	-	-	2,138	-	-	47,984

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Hong Kong, China, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	-	-	-	-	-
2 Import	4,818	-	-	12,834	2,025
3 Export	-8	-	-	-1,254	-
4 International Marine Bunkers	-	-	-	-3,589	-
5 Stock Change	-253	-	-	-178	-
6 Total Primary Energy Supply	4,556	-	-	7,814	2,025
7 Public Electricity	-4,552	-	-	-37	-2,025
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-652	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	0	-	-	-0	-
14 Total Final Energy Consumption	4	-	-	7,125	-
15 Industry Sector	-	-	-	1,113	-
16 Transport Sector	-	-	-	5,889	-
17 Other Sector	-	-	-	123	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	123	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

Indonesia, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	50,316	-	61,956	-	50,189
2 Import	-	-	14,293	11,403	-
3 Export	-35,495	-	-30,593	-8,571	-25,284
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	14,822	-	45,656	2,832	24,905
7 Public Electricity	-10,612	-	-	-4,570	-4,604
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	1,482	-5,442
10 Petroleum Refineries	-	-	-47,567	47,312	-609
11 Coal Transformation	-17	11	-	-	-
12 Loss & Own Use	-	-	-	-	-11,724
13 Discrepancy	70	-1	1,912	-3,082	7,820
14 Total Final Energy Consumption	4,262	10	-	43,974	10,345
15 Industry Sector	3,364	-	-	10,479	6,564
16 Transport Sector	-	-	-	21,523	15
17 Other Sector	-	-	-	9,189	10
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	9,189	10
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	3,756

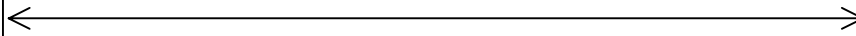
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-
-	-	-	-	-	890	-	20,568
-	-	-	-	-	-136	-	-1,398
-	-	-	-	-	-	-	-3,589
-	-	-	-	-	-	-	-432
-	-	-	-	-	754	-	15,150
-	-	-	-	-	2,788	-	-3,826
-	-	-	-	-	-	-	-
571	-	-	-	-	-	-	-81
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-339	-	-339
0	-	-	-	-	0	-	-0
571	-	-	-	-	3,204	-	10,904
22	-	-	-	-	400	-	1,535
-	-	-	-	-	-	-	5,889
549	-	-	-	-	2,804	-	3,476
-	-	-	-	-	-	-	-
549	-	-	-	-	2,795	-	3,467
-	-	-	-	-	9	-	9
-	-	-	-	-	-	-	-

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	916	-	5,082	-	-	-	168,460
-	-	-	-	-	-	-	25,696
-	-	-	-	-	-	-	-99,943
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	916	-	5,082	-	-	-	94,213
-	-916	-	-5,082	-	8,645	-	-17,139
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-3,960
-	-	-	-	-	-	-	-865
-	-	-	-	-	-	-	-6
-	-	-	-	-	-1,460	-	-13,183
-	-0	-	-	-	83	-	6,801
-	-	-	-	-	7,269	-	65,861
-	-	-	-	-	3,061	-	23,468
-	-	-	-	-	-	-	21,538
-	-	-	-	-	2,867	-	12,066
-	-	-	-	-	-	-	-
-	-	-	-	-	2,867	-	12,066
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3,756

Energy Balances

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Energy Balances

Japan, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	1,484	-	660	-	2,216
2 Import	94,793	-	213,926	50,084	65,051
3 Export	-	-1,266	-	-16,147	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-264	-	-1,129	671	2
6 Total Primary Energy Supply	96,013	-1,266	213,456	34,608	67,269
7 Public Electricity	-35,577	-4,342	-4,871	-9,814	-46,404
8 Autoproducers of Electricity	-5,470	-2,565	-	-12,055	-
9 Gas Processing	-	-814	-	-2,691	-19,486
10 Petroleum Refineries	-	-	-207,765	212,968	-
11 Coal Transformation	-39,663	34,563	-	-736	-
12 Loss & Own Use	-86	-2,794	-11	-11,646	-404
13 Discrepancy	415	-3,243	-809	-1,154	-520
14 Total Final Energy Consumption	15,632	19,539	1	209,479	455
15 Industry Sector	15,632	18,575	1	72,939	446
16 Transport Sector	-	-	-	84,734	-
17 Other Sector	-	964	-	45,202	8
17.1 Agriculture	-	-	-	9,752	-
17.2 Residential & Commercial	-	964	-	35,450	8
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	6,604	-

Republic of Korea, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	1,632	-	-	-	-
2 Import	40,556	-	119,585	24,373	18,912
3 Export	-	-	-	-39,892	-
4 International Marine Bunkers	-	-	-	-6,776	-
5 Stock Change	85	-	-154	38	-172
6 Total Primary Energy Supply	42,273	-	119,431	-22,256	18,740
7 Public Electricity	-23,920	-	-	-6,501	-6,186
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-176	-12,050
10 Petroleum Refineries	-	-	-119,635	119,712	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-471
13 Discrepancy	1,152	-	204	-2,017	-32
14 Total Final Energy Consumption	19,506	-	-	88,762	-
15 Industry Sector	18,815	-	-	39,050	-
16 Transport Sector	-	-	-	30,122	-
17 Other Sector	690	-	-	16,751	-
17.1 Agriculture	-	-	-	3,640	-
17.2 Residential & Commercial	690	-	-	13,111	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	2,839	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	7,388	83,680	3,837	2,564	-	-	101,828
-	-	-	-	-	-	-	423,854
-	-	-	-	-	-	-	-17,412
-	-	-	-	-	-	-	-721
-	7,388	83,680	3,837	2,564	-	-	507,549
-	-6,963	-83,532	-2,654	-185	77,346	-	-116,995
-337	-406	-141	-204	-1,554	12,944	606	-9,183
23,311	-	-	-	-	-	-	319
-	-	-	-	-	-	-	5,203
-	-	-	-	-	-	-	-5,836
-298	-	-	-	-	-9,331	-	-24,570
-324	-19	-7	0	1,497	1,575	-66	-2,655
22,352	-	-	979	2,322	82,535	540	353,833
8,330	-	-	-	2,276	35,361	-	153,560
-	-	-	-	-	1,868	-	86,601
14,021	-	-	979	46	45,306	540	107,068
-	-	-	96	-	335	-	10,183
14,021	-	-	883	46	44,972	540	96,885
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	6,604

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	357	29,223	-	2,456	-	-	33,667
-	-	-	-	-	-	-	203,426
-	-	-	-	-	-	-	-39,892
-	-	-	-	-	-	-	-6,776
-	-	-	-	-	-	-	-203
-	357	29,223	-	2,456	-	-	190,224
-198	-357	-29,223	-	-	24,529	1,201	-40,654
-	-	-	-	-	-	-	-
12,050	-	-	-	-	-	-	-177
-	-	-	-	-	-	-	77
-	-	-	-	-	-	-	-
-110	-	-	-	-	-2,364	-51	-2,997
220	-	-	-	0	-0	0	-473
11,961	-	-	-	2,456	22,165	1,150	146,000
3,230	-	-	-	2,215	11,163	-	74,474
7	-	-	-	-	194	-	30,323
8,724	-	-	-	241	10,807	1,150	38,364
20	-	-	-	-	515	-	4,175
8,704	-	-	-	241	9,815	1,150	33,711
-	-	-	-	-	477	-	477
-	-	-	-	-	-	-	2,839

Energy Balances

Malaysia, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	344	-	32,851	-	53,659
2 Import	2,665	-	8,890	7,137	-
3 Export	-34	-	-18,018	-8,900	-17,814
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-64	-	247	-0	-
6 Total Primary Energy Supply	2,911	-	23,970	-1,763	35,845
7 Public Electricity	-1,994	-	-	-1,008	-11,922
8 Autoproducers of Electricity	-	-	-	-159	-495
9 Gas Processing	-	-	-	-2,044	-6,814
10 Petroleum Refineries	-	-	-23,846	22,817	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-348	-210
13 Discrepancy	60	-	-124	2,829	-11,783
14 Total Final Energy Consumption	977	-	-	20,324	4,621
15 Industry Sector	977	-	-	5,009	2,937
16 Transport Sector	-	-	-	13,121	14
17 Other Sector	-	-	-	1,471	14
17.1 Agriculture	-	-	-	98	-
17.2 Residential & Commercial	-	-	-	1,373	14
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	723	1,655

Mexico, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,710	-	165,982	-	41,834
2 Import	1,824	261	-	14,486	3,199
3 Export	-4	-1	-88,982	-4,704	-208
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-769	590	-1,878	52	-3,579
6 Total Primary Energy Supply	6,761	851	75,122	9,834	41,245
7 Public Electricity	-5,422	-	-	-22,295	-8,828
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	23,257
10 Petroleum Refineries	-	-	-73,517	77,498	-35,120
11 Coal Transformation	-1,414	1,308	-	-	-
12 Loss & Own Use	-	-24	-731	-4,939	-14,480
13 Discrepancy	75	-322	-874	-352	3,637
14 Total Final Energy Consumption	-	1,813	-	59,747	9,712
15 Industry Sector	-	1,813	-	6,644	8,440
16 Transport Sector	-	-	-	38,114	-
17 Other Sector	-	-	-	10,423	710
17.1 Agriculture	-	-	-	1,995	-
17.2 Residential & Commercial	-	-	-	8,428	710
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	4,537	225

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	632	-	-	-	-	-	87,486
-	-	-	-	-	-	-	18,692
-	-	-	-	-	-	-	-44,766
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	183
-	632	-	-	-	-	-	61,595
-	-632	-	-	-	5,965	-	-9,591
-	-	-	-	-	172	-	-482
-	-	-	-	-	-	-	-8,858
-	-	-	-	-	-	-	-1,029
-	-	-	-	-	-	-	-
-	-	-	-	-	-209	-	-767
-	0	-	-	-	-334	-	-9,352
-	-	-	-	-	5,594	-	31,516
-	-	-	-	-	2,930	-	11,853
-	-	-	-	-	3	-	13,138
-	-	-	-	-	2,660	-	4,145
-	-	-	-	-	-	-	98
-	-	-	-	-	2,660	-	4,047
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,378

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	2,411	2,293	4,721	8,332	-	-	231,283
-	-	-	-	-	28	-	19,798
-	-	-	-	-	-23	-	-93,922
-	-	-	-	-	-	-	-
-	-	-	-	-24	-	-	-5,608
-	2,411	2,293	4,721	8,308	5	-	151,551
-	-2,411	-2,293	-4,721	-	16,553	-	-29,416
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	23,257
-	-	-	-	-	-	-	-31,140
-	-	-	-	-	-	-	-106
-	-	-	-	-	-3,463	-	-23,636
-	-	-	-	0	495	-	2,659
-	-	-	-	8,308	13,591	-	93,170
-	-	-	-	2,084	7,995	-	26,977
-	-	-	-	-	97	-	38,211
-	-	-	-	6,111	5,498	-	22,742
-	-	-	-	-	642	-	2,637
-	-	-	-	6,111	4,857	-	20,105
-	-	-	-	-	-	-	-
-	-	-	-	113	-	-	4,875

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New Zealand, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	2,162	-	1,576	266	5,319
2 Import	22	7	4,790	1,350	-
3 Export	-1,290	-1	-1,277	-149	-
4 International Marine Bunkers	-	-	-	-250	-
5 Stock Change	-	-	-121	24	-0
6 Total Primary Energy Supply	894	6	4,968	1,241	5,319
7 Public Electricity	-337	-	-	-	-1,998
8 Autoproducers of Electricity	-15	-	-	-	-499
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-5,201	4,927	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-45	-	-	-213	-136
13 Discrepancy	424	-6	234	-132	23
14 Total Final Energy Consumption	920	-	-	5,824	2,708
15 Industry Sector	773	-	-	293	445
16 Transport Sector	2	-	-	4,841	2
17 Other Sector	146	-	-	445	343
17.1 Agriculture	13	-	-	301	-
17.2 Residential & Commercial	132	-	-	143	343
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	245	1,919

Papua New Guinea, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	2,532	-	144
2 Import	-	-	-	349	-
3 Export	-	-	-2,477	-	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-55	-	-
6 Total Primary Energy Supply	-	-	-0	349	144
7 Public Electricity	-	-	-	-33	-
8 Autoproducers of Electricity	-	-	-	-169	-137
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-	-	0	0	-7
14 Total Final Energy Consumption	-	-	-	147	-
15 Industry Sector	-	-	-	58	-
16 Transport Sector	-	-	-	61	-
17 Other Sector	-	-	-	19	-
17.1 Agriculture	-	-	-	0	-
17.2 Residential & Commercial	-	-	-	19	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	9	-

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114



Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,859	-	3,027	1,282	-	-	15,492
-	-	-	-	-	-	-	6,169
-	-	-	-	-	-	-	-2,717
-	-	-	-	-	-	-	-250
-	-	-	-	-	-	-	-97
-	1,859	-	3,027	1,282	-	-	18,597
-	-1,859	-	-2,536	-22	3,140	-	-3,611
-	-	-	-35	-501	264	-	-785
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-275
-	-	-	-	-	-	-	-
-	-	-	-143	-	-301	-	-839
-	-	-	-0	-50	-211	-	282
-	-	-	313	710	2,893	-	13,369
-	-	-	251	551	1,134	-	3,447
-	-	-	-	-	52	-	4,896
-	-	-	62	160	1,707	-	2,862
-	-	-	-	-	108	-	423
-	-	-	62	160	1,599	-	2,439
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,164

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	80	-	-	-	-	-	2,756
-	-	-	-	-	-	-	349
-	-	-	-	-	-	-	-2,477
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-55
-	80	-	-	-	-	-	573
-	-47	-	-	-	96	-	16
-	-33	-	-	-	131	-	-208
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-14	-	-14
-	-	-	-	-	5	-	-2
-	-	-	-	-	217	-	364
-	-	-	-	-	160	-	218
-	-	-	-	-	-	-	61
-	-	-	-	-	58	-	77
-	-	-	-	-	-	-	0
-	-	-	-	-	58	-	77
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	9

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Energy Balances

Peru, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	13	-	4,705	-	1,614
2 Import	341	131	3,744	1,240	-
3 Export	-	-	-945	-1,891	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	81	6	208	-162	-
6 Total Primary Energy Supply	435	137	7,712	-813	1,614
7 Public Electricity	-89	-	-	-245	-218
8 Autoproducers of Electricity	-	-	-	-280	-25
9 Gas Processing	-	-87	-	-	-191
10 Petroleum Refineries	-	-	-8,114	8,164	-
11 Coal Transformation	-32	19	-	-	-
12 Loss & Own Use	-	-0	-	-367	-277
13 Discrepancy	16	-16	402	366	-902
14 Total Final Energy Consumption	329	53	-	6,826	0
15 Industry Sector	329	53	-	1,796	-
16 Transport Sector	-	-	-	3,199	-
17 Other Sector	0	-	-	1,322	0
17.1 Agriculture	0	-	-	43	-
17.2 Residential & Commercial	-	-	-	1,060	0
17.3 Other	-	-	-	219	-
18 Non-energy	-	-	-	139	-

Philippines, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	590	-	64	-	1,151
2 Import	3,644	-	15,003	2,957	-
3 Export	-	-	-	-1,370	-
4 International Marine Bunkers	-	-	-	-215	-
5 Stock Change	46	-	-304	-230	-
6 Total Primary Energy Supply	4,280	-	14,762	1,141	1,151
7 Public Electricity	-3,397	-	-	-2,471	-1,151
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-15,387	13,947	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-642	-	-
13 Discrepancy	-75	-	1,267	516	-
14 Total Final Energy Consumption	809	-	-	13,133	-
15 Industry Sector	696	-	-	1,656	-
16 Transport Sector	-	-	-	8,695	-
17 Other Sector	-	-	-	2,572	-
17.1 Agriculture	-	-	-	254	-
17.2 Residential & Commercial	-	-	-	2,318	-
17.3 Other	-	-	-	-	-
18 Non-energy	113	-	-	207	-

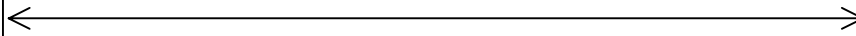
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,894	-	54	-	-	-	8,279
-	-	-	-	-	-	-	5,457
-	-	-	-	-	-	-	-2,835
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	132
-	1,894	-	54	-	-	-	11,032
-	-1,848	-	-	-	1,652	-	-747
-	-46	-	-	-	135	-	-215
-	-	-	-	-	-	-	-279
-	-	-	-	-	-	-	50
-	-	-	-	-	-	-	-13
-	-	-	-	-	-25	-	-670
-	-0	-	-	-	-192	-	-326
-	-	-	54	-	1,570	-	8,832
-	-	-	-	-	934	-	3,112
-	-	-	-	-	-	-	3,199
-	-	-	54	-	636	-	2,012
-	-	-	-	-	44	-	87
-	-	-	54	-	565	-	1,678
-	-	-	-	-	27	-	246
-	-	-	-	-	-	-	139

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	611	-	8,980	1,801	-	-	13,196
-	-	-	-	-	-	-	21,604
-	-	-	-	-	-	-	-1,370
-	-	-	-	-	-	-	-215
-	-	-	-	-	-	-	-488
-	611	-	8,980	1,801	-	-	32,727
-	-611	-	-8,980	-1,801	4,683	-	-13,728
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-1,439
-	-	-	-	-	-680	-	-1,322
-	-	-	-	-	-637	-	1,071
-	-	-	-	-	3,366	-	17,308
-	-	-	-	-	1,243	-	3,594
-	-	-	-	-	90	-	8,784
-	-	-	-	-	2,033	-	4,605
-	-	-	-	-	-	-	254
-	-	-	-	-	2,033	-	4,352
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	320

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Energy Balances

Russia, 2001

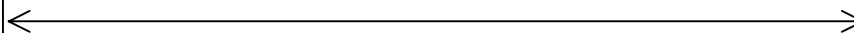
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	115,349	-	346,187	-	468,771
2 Import	15,035	58	5,123	130	3,342
3 Export	-22,404	-1,441	-162,271	-52,544	-146,108
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-5,612	-313	-909	-49	-690
6 Total Primary Energy Supply	102,369	-1,696	188,129	-52,464	325,316
7 Public Electricity	-49,897	-	-	-9,075	-112,595
8 Autoproducers of Electricity	-19,433	-4,264	-1,042	-12,731	-77,148
9 Gas Processing	-	18,514	-	-7,307	-9,773
10 Petroleum Refineries	-	-	-162,180	155,854	-
11 Coal Transformation	-21,145	25,731	-	-	-10
12 Loss & Own Use	-	-212	-3,850	-6,628	-8,450
13 Discrepancy	0	-0	-0	-3,249	-0
14 Total Final Energy Consumption	11,793	38,072	21,056	64,402	117,339
15 Industry Sector	1,879	37,662	22	10,787	26,514
16 Transport Sector	324	5	6	37,073	27,090
17 Other Sector	9,334	22	591	14,821	46,679
17.1 Agriculture	245	0	11	5,806	443
17.2 Residential & Commercial	8,704	18	503	6,722	45,428
17.3 Other	384	4	77	2,293	808
18 Non-energy	257	383	20,437	1,722	17,056

Singapore, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	-	-	-
2 Import	0	0	41,508	41,909	0
3 Export	-0	-0	-	-41,278	-0
4 International Marine Bunkers	-	-	-	-21,957	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	0	0	41,508	-21,326	-0
7 Public Electricity	-	-	-	-	-1,511
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-0	-0	-41,508	21,326	1,511
14 Total Final Energy Consumption	-	-	-	-	-
15 Industry Sector	-	-	-	-	-
16 Transport Sector	-	-	-	-	-
17 Other Sector	-	-	-	-	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	-	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	15,123	35,686	79	365	-	-	981,560
-	-	-	-	-	843	-	24,531
-	-	-	-	-	-2,207	-	-386,975
-	-	-	-	-	-	-	-7,573
-	15,123	35,686	79	365	-1,364	-	611,542
-	-15,044	-35,686	-79	-0	72,348	56,067	-94,062
-	-79	-	-	-	4,303	88,151	-22,244
-	-	-	-	-	-	-	1,434
-	-	-	-	-	-	-	-6,326
-	-	-	-	-	-	-	4,576
-	-	-	-	-	-21,060	-16,783	-56,984
-	0	-	-	0	-1,024	9,239	4,967
-	-	-	-	364	53,203	136,674	442,904
-	-	-	-	-	27,657	50,459	154,979
-	-	-	-	-	5,430	3,550	73,478
-	-	-	-	364	20,116	82,665	174,591
-	-	-	-	-	2,187	4,022	12,713
-	-	-	-	-	12,310	72,044	145,730
-	-	-	-	364	5,619	6,600	16,149
-	-	-	-	-	-	-	39,855

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	83,417
-	-	-	-	-	-	-	-41,279
-	-	-	-	-	-	-	-21,957
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	20,182
-	-	-	-	-	2,846	-	1,335
-	-	-	-	-	-	-	-
106	-	-	-	-	-	-	106
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-106	-	-	-	-	-295	-	-19,072
-	-	-	-	-	2,550	-	2,550
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Energy Balances

Chinese Taipei, 2001

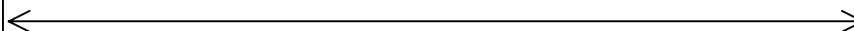
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	35	-	680
2 Import	29,948	55	37,884	8,804	5,533
3 Export	-	-	-	-4,470	-
4 International Marine Bunkers	-	-	-	-2,393	-
5 Stock Change	-669	25	-140	-591	-169
6 Total Primary Energy Supply	29,278	79	37,779	1,349	6,044
7 Public Electricity	-15,930	-	-	-4,224	-3,831
8 Autoproducers of Electricity	-4,611	-423	-	-868	-246
9 Gas Processing	-	933	-	-	-1,496
10 Petroleum Refineries	-	-	-38,981	36,682	-
11 Coal Transformation	-3,670	3,663	-	-	-
12 Loss & Own Use	-	-2	-	-2,067	-
13 Discrepancy	-497	-0	1,202	-748	-471
14 Total Final Energy Consumption	4,571	4,250	-	30,125	-
15 Industry Sector	4,503	4,250	-	12,732	-
16 Transport Sector	-	-	-	12,274	-
17 Other Sector	-	-	-	3,710	-
17.1 Agriculture	-	-	-	784	-
17.2 Residential & Commercial	-	-	-	2,926	-
17.3 Other	-	-	-	-	-
18 Non-energy	64	-	-	1,408	-

Thailand, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,697	-	5,492	-	17,193
2 Import	3,103	37	35,923	392	5,696
3 Export	-	-	-1,925	-5,610	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	61	-	783	-576	-
6 Total Primary Energy Supply	8,861	37	40,273	-5,794	22,890
7 Public Electricity	-4,480	-	-	-738	-17,399
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	457	1,846	-179
10 Petroleum Refineries	-	-	-38,446	32,499	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-152	-	-3,739
13 Discrepancy	0	-	-0	197	0
14 Total Final Energy Consumption	4,380	37	2,132	28,010	1,572
15 Industry Sector	4,380	37	-	4,170	1,570
16 Transport Sector	-	-	-	18,800	2
17 Other Sector	-	-	-	4,583	-
17.1 Agriculture	-	-	-	2,858	-
17.2 Residential & Commercial	-	-	-	1,725	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	2,132	456	-

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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	789	9,248	-	-	-	-	10,751
-	-	-	-	-	-	-	82,223
-	-	-	-	-	-	-	-4,470
-	-	-	-	-	-	-	-2,393
-	-	-	-	-	-	-	-1,545
-	789	9,248	-	-	-	-	84,566
-	-789	-9,248	-	-	13,422	-	-20,599
-	-	-	-	-	2,791	-	-3,357
1,415	-	-	-	-	-	-	851
-	-	-	-	-	-	-	-2,299
-	-	-	-	-	-	-	-7
-413	-	-	-	-	-2,213	-	-4,696
471	-	-	-	-	-0	-	-42
1,473	-	-	-	-	13,999	-	54,417
644	-	-	-	-	7,519	-	29,648
-	-	-	-	-	96	-	12,370
828	-	-	-	-	6,384	-	10,922
-	-	-	-	-	192	-	975
828	-	-	-	-	6,193	-	9,947
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,472

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	542	-	2	-	-	-	28,926
-	-	-	-	-	248	-	45,399
-	-	-	-	-	-23	-	-7,557
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	267
-	542	-	2	-	225	-	67,035
-	-542	-	-2	-	8,808	-	-14,353
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,125
-	-	-	-	-	-	-	-5,947
-	-	-	-	-	-	-	-
-	-	-	-	-	-1,096	-	-4,988
-	-	-	-	-	0	-	197
-	-	-	-	-	7,937	-	44,069
-	-	-	-	-	3,604	-	13,762
-	-	-	-	-	3	-	18,805
-	-	-	-	-	4,330	-	8,913
-	-	-	-	-	15	-	2,874
-	-	-	-	-	4,315	-	6,040
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,588

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United States of America, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	564,686	-	305,879	59,494	458,013
2 Import	11,843	1,389	487,560	82,891	93,060
3 Export	-29,945	-635	-1,089	-46,101	-8,305
4 International Marine Bunkers	-	-	-	-30,703	-
5 Stock Change	-15,241	54	-5,302	-8,119	-26,338
6 Total Primary Energy Supply	531,343	809	787,048	57,463	516,430
7 Public Electricity	-399,677	-	-18,226	-18,789	-62,142
8 Autoproducers of Electricity	-86,917	-	-11,493	-	-98,428
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-812,399	821,710	-
11 Coal Transformation	-17,120	15,481	-	-	-
12 Loss & Own Use	-	-	-148	-49,361	-
13 Discrepancy	23,496	0	55,219	32,833	43,090
14 Total Final Energy Consumption	51,125	16,290	-	843,856	398,950
15 Industry Sector	48,708	16,290	-	152,092	201,489
16 Transport Sector	-	-	-	623,610	14,820
17 Other Sector	2,359	-	-	51,215	182,641
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	2,359	-	-	51,215	182,641
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

Viet Nam, 2001

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	7,279	-	17,351	-	1,563
2 Import	-	-	-	9,154	-
3 Export	-2,350	-	-17,033	-1,119	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	27	-	-	-	-
6 Total Primary Energy Supply	4,955	-	318	8,035	1,563
7 Public Electricity	-1,281	-	-	-1,385	-1,106
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	454	-442
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-318	-	-
13 Discrepancy	0	-	-0	-0	-0
14 Total Final Energy Consumption	3,674	-	-	7,104	15
15 Industry Sector	2,906	-	-	1,092	15
16 Transport Sector	-	-	-	4,143	-
17 Other Sector	768	-	-	1,708	-
17.1 Agriculture	274	-	-	409	-
17.2 Residential & Commercial	494	-	-	1,299	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	162	-



Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	17,886	200,328	13,438	18,412	-	-	1,638,138
-	-	-	-	-	3,306	-	680,050
-	-	-	-	-	-1,562	-	-87,636
-	-	-	-	-	-	-	-30,703
-	-	-	-	-	-	-	-54,946
-	17,886	200,328	13,438	18,412	1,745	-	2,144,902
-	-16,336	-139,195	-166	-486	225,994	-	-429,023
-	-1,550	-61,133	-13,272	-17,926	96,920	-	-193,800
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	9,310
-	-	-	-	-	-	-	-1,639
-	-	-	-	-	-	-	-49,509
-	0	0	0	-0	-42,641	-	111,997
-	-	-	-	-	282,018	-	1,592,238
-	-	-	-	-	85,465	-	504,043
-	-	-	-	-	-	-	638,431
-	-	-	-	-	196,552	-	432,767
-	-	-	-	-	-	-	-
-	-	-	-	-	196,552	-	432,767
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Energy Balances

Unit: ktoe

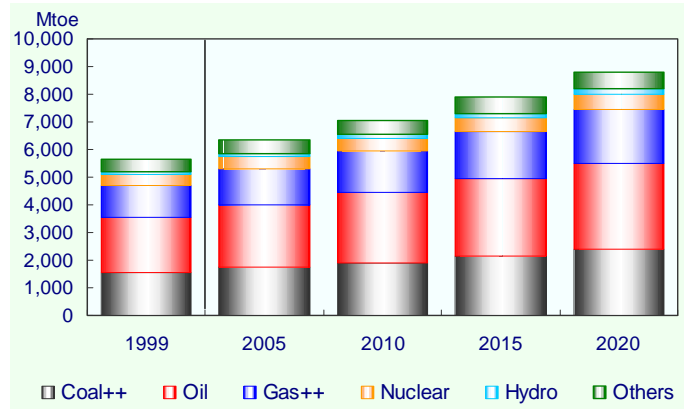
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,566	-	-	-	-	-	27,759
-	-	-	-	-	-	-	9,154
-	-	-	-	-	-	-	-20,502
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	27
-	1,566	-	-	-	-	-	16,437
-	-1,566	-	-	-	2,632	-	-2,706
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	12
-	-	-	-	-	-	-	-
-	-	-	-	-	-409	-	-727
-	-	-	-	-	0	-	0
-	-	-	-	-	2,223	-	13,017
-	-	-	-	-	903	-	4,916
-	-	-	-	-	21	-	4,163
-	-	-	-	-	1,299	-	3,776
-	-	-	-	-	40	-	724
-	-	-	-	-	1,259	-	3,052
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	162

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Outlook

Primary Energy Supply Outlook by Energy



	1999	2005	2010	2015	Mtoe 2020
Coal++	1,539.6	1,742.5	1,905.0	2,127.9	2,402.2
Oil	2,022.9	2,249.7	2,522.4	2,802.3	3,107.2
Gas++	1,134.7	1,329.0	1,535.9	1,733.3	1,949.2
Nuclear	378.6	407.2	424.5	485.7	537.4
Hydro	106.3	125.3	146.4	165.6	184.6
Others	476.6	512.2	539.7	568.5	596.1
Total	5,658.7	6,365.9	7,073.9	7,883.3	8,776.7

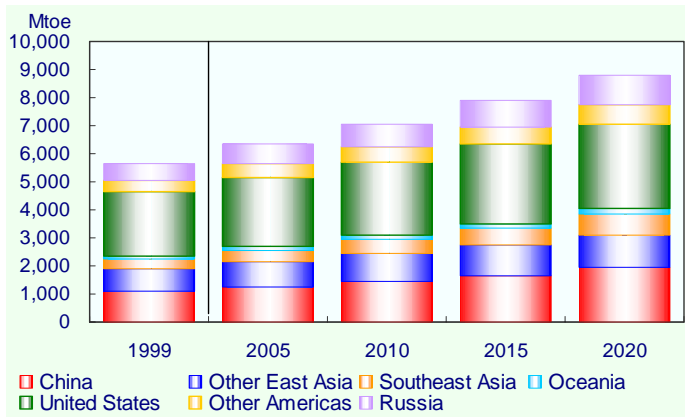
	1999	2005	2010	2015	Share (%) 2020
Coal++	27.2	27.4	26.9	27.0	27.4
Oil	35.7	35.3	35.7	35.5	35.4
Gas++	20.1	20.9	21.7	22.0	22.2
Nuclear	6.7	6.4	6.0	6.2	6.1
Hydro	1.9	2.0	2.1	2.1	2.1
Others	8.4	8.0	7.6	7.2	6.8

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	1,087.9	1,263.4	1,441.3	1,662.5	1,947.1
Other East Asia	794.0	877.9	983.8	1,078.0	1,167.4
Southeast Asia	349.6	420.9	504.4	608.5	733.0
Oceania	127.7	146.1	159.3	174.7	191.4
United States	2,270.3	2,446.4	2,620.4	2,817.7	3,014.8
Other Americas	431.9	495.3	559.8	624.6	692.1
Russia	597.1	715.8	804.9	918.2	1,030.9
APEC 21	5,658.5	6,365.8	7,073.9	7,884.2	8,776.7

	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	2001	1980	1990	2001	1980	1990
APEC 19	1,787	2,064	2,338	9,763	14,174	19,405	9,561	14,304
APEC 21	1,980	2,278	2,562	-	14,731	19,813	-	15,745
East Asia	1,159.0	1,327.6	1,475.4	3,759.2	5,965.0	7,901.4	2,771.3	5,000.3
China	981.2	1,135.2	1,271.9	163.6	397.6	1,117.1	703.7	1,710.1
Hong Kong, China	5.0	5.7	6.7	56.9	107.3	164.8	54.7	103.2
Japan	116.8	123.5	127.0	3,304.4	4,936.0	5,647.7	1,771.1	2,645.5
Republic of Korea	38.1	42.9	47.3	149.1	341.6	639.2	156.6	358.9
Chinese Taipei	17.8	20.4	22.4	85.2	182.5	332.6	85.2	182.5
Southeast Asia	259.4	316.4	376.8	247.0	431.1	711.6	571.8	956.6
Brunei Darussalam	0.2	0.3	0.3	5.7	4.8	5.4	6.2	5.3
Indonesia	148.3	178.2	209.0	74.6	138.4	216.2	197.5	366.6
Malaysia	13.8	18.2	23.8	31.6	56.5	112.1	52.4	93.6
Philippines	48.0	61.0	78.3	56.3	66.6	91.2	180.2	213.0
Singapore	2.4	3.0	4.1	26.6	53.7	112.0	20.4	41.3
Thailand	46.7	55.6	61.2	52.2	111.1	174.7	108.8	231.7
Oceania	20.9	24.5	28.5	281.8	373.2	544.8	285.0	376.5
Australia	14.7	17.1	19.4	235.8	318.0	469.2	234.6	316.4
New Zealand	3.1	3.4	3.8	43.4	52.2	70.9	43.2	52.0
Papua New Guinea	3.1	4.0	5.3	2.7	3.0	4.7	7.2	8.1
North America	251.8	277.2	316.4	5,178.7	7,054.9	9,731.2	5,325.6	7,253.1
Canada	24.6	27.8	31.1	406.8	534.4	717.4	455.4	598.3
United States of America	227.2	249.4	285.3	4,771.9	6,520.5	9,013.9	4,870.2	6,654.8
Latin America	96.0	117.9	141.2	296.0	349.3	515.6	613.3	722.7
Chile	11.1	13.1	15.4	29.7	43.0	82.9	47.8	69.2
Mexico	67.6	83.2	99.4	221.8	265.3	371.7	481.9	576.4
Peru	17.3	21.6	26.3	44.5	41.1	60.9	83.6	77.1
Russia	139.0	148.3	144.8	439.7	543.9	377.8	1,107.7	1,370.3
Viet Nam	53.7	66.2	79.5	-	14.0	31.0	-	70.5

To calculate the regional real GDP (1995 Price and 1995 PPP) of East Asia, the real GDP (1995 Price and 1995 USD) of Chinese Taipei is used instead of its real GDP (1995 Price and 1995 PPP).

	Energy Indigenous Production			Net Import			Total Primary Energy Supply			
	Mtoe			Mtoe			Mtoe			
2001	1980	1990	2001	1980	1990	2001	1980	1990	2001	
22,109	2,557.8	3,195.7	3,757.7	504.2	538.9	944.8	3,029.6	3,647.8	4,585.4	
23,217	-	-	4,767.0	-	-	571.0	-	-	5,213.3	
8,994.6	477.3	774.9	909.4	339.6	449.9	680.4	819.6	1,197.4	1,587.5	
4,804.8	414.12	670.46	763.12	-18.60	-28.96	13.50	399.64	621.25	790.02	CHN
158.5	0.00	0.00	0.00	6.00	10.79	19.17	5.29	10.65	15.15	HKG
3,027.0	48.71	72.58	101.83	303.24	361.61	406.44	352.60	432.55	507.55	JPN
671.7	9.22	21.69	33.67	29.59	69.49	163.53	38.32	89.36	190.22	KOR
332.6	5.24	10.15	10.75	19.36	37.01	77.75	23.70	43.55	84.57	TWN
1,512.0	132.1	199.0	315.6	-53.6	-51.2	-15.2	71.8	133.7	278.2	
5.9	20.66	15.26	17.52	-17.37	-12.90	-15.08	3.24	2.07	2.42	BRN
572.4	92.08	119.43	168.46	-60.71	-65.85	-74.25	31.07	53.25	94.21	IDN
185.7	16.07	46.53	87.49	-5.01	-25.88	-26.07	10.55	20.47	61.60	MYS
291.8	2.70	6.01	13.20	10.39	11.41	20.23	12.44	17.32	32.73	PHL
86.1	0.00	0.02	0.00	7.13	23.98	42.14	2.44	10.93	20.18	SGP
364.2	0.53	11.75	28.93	12.00	18.01	37.84	12.10	29.67	67.04	THA
550.0	92.1	175.2	258.6	-13.7	-66.8	-132.5	79.4	103.0	125.0	
466.9	86.08	158.19	240.38	-18.31	-65.30	-133.82	69.28	87.94	105.78	AUS
70.6	6.03	12.35	15.49	3.97	2.19	3.45	9.50	14.18	18.60	NZL
12.5	0.03	4.61	2.76	0.63	-3.72	-2.13	0.63	0.86	0.63	PNG
10,002.8	1,689.1	1,838.9	2,023.5	277.6	266.4	468.4	1,942.9	2,069.5	2,407.2	
803.2	207.70	277.42	385.37	-10.95	-68.41	-123.97	194.24	205.97	262.26	CAN
9,199.6	1,481.4	1,561.4	1,638.1	288.6	334.8	592.4	1,748.6	1,863.6	2,144.9	USA
1,055.6	167.1	207.8	250.6	-45.8	-59.4	-56.3	115.9	144.2	187.5	
133.5	7.04	7.76	11.05	4.12	6.96	15.19	10.97	14.26	24.92	CHL
807.7	148.99	191.89	231.28	-46.89	-65.74	-74.12	96.74	122.45	151.55	MEX
114.3	11.10	8.19	8.28	-3.00	-0.60	2.62	8.19	7.54	11.03	PER
951.8	-	-	981.6	-	-	-362.4	-	-	611.5	RUS
156.3	-	-	27.76	-	-	9.15	-	-	16.44	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	2001	1980	1990	2001	1980	1990
APEC 19	2,387.1	2,780.8	3,276.8	3,491.5	5,059.6	6,982.0	1.70	1.77
APEC 21	-	-	3,732.8	-	-	7,626.4	-	-
East Asia	610.3	883.2	1,134.1	864.1	1,510.1	2,450.8	0.71	0.90
China	301.4	469.3	569.0	271.6	573.1	1,033.3	0.41	0.55
Hong Kong, China	3.5	6.7	10.9	10.9	23.8	37.3	1.05	1.87
Japan	252.7	305.1	353.8	511.9	744.8	959.7	3.02	3.50
Republic of Korea	35.7	71.9	146.0	32.7	94.4	257.7	1.01	2.08
Chinese Taipei	17.1	30.3	54.4	36.9	74.0	162.8	1.33	2.14
Southeast Asia	47.0	82.0	161.9	50.5	122.9	313.1	0.28	0.42
Brunei Darussalam	0.2	0.4	0.6	0.3	1.0	2.5	16.81	8.06
Indonesia	21.1	34.0	65.9	7.3	30.5	84.5	0.21	0.30
Malaysia	6.4	13.1	31.5	8.7	19.9	65.0	0.77	1.12
Philippines	9.0	10.3	17.3	15.0	19.3	39.1	0.26	0.28
Singapore	1.0	2.2	2.6	6.1	14.2	29.7	1.01	3.59
Thailand	9.3	22.0	44.1	13.1	38.0	92.3	0.26	0.53
Oceania	59.3	74.0	96.8	101.6	162.4	222.0	3.80	4.21
Australia	51.5	63.2	83.1	81.0	133.1	185.9	4.72	5.15
New Zealand	7.3	10.1	13.4	19.4	27.7	33.6	3.05	4.13
Papua New Guinea	0.4	0.6	0.4	1.2	1.7	2.5	0.20	0.22
North America	1,591.0	1,639.9	1,762.7	2,404.6	3,144.9	3,780.4	7.72	7.47
Canada	156.7	164.6	185.2	307.4	432.9	501.1	7.90	7.41
United States of America	1,434.3	1,475.2	1,577.4	2,097.2	2,712.0	3,279.3	7.70	7.47
Latin America	79.5	101.7	121.3	70.7	119.3	215.7	1.21	1.22
Chile	8.3	11.0	19.3	9.7	15.4	39.4	0.98	1.09
Mexico	65.0	84.4	93.2	52.3	92.1	158.0	1.43	1.47
Peru	6.2	6.2	8.8	8.7	11.8	18.3	0.47	0.35
Russia	-	-	442.9	-	-	618.6	-	-
Viet Nam	-	-	13.0	-	-	25.9	-	-

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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				
	2001	1980	1990	2001	1980	1990	2001	1980	1990		2001
	1.96	310.3	257.4	236.3	316.9	255.0	207.4	1,335.7	1,347.5	1,401.4	
	2.03	-	-	263.1	-	-	224.5	-	-	1,456.7	
	1.08	218.0	200.7	200.9	295.7	239.5	176.5	526.6	665.2	768.7	
	0.62	2,442.7	1,562.5	707.2	567.9	363.3	164.4	307.2	413.4	447.3	CHN
	2.25	93.1	99.2	91.9	96.8	103.2	95.6	687.5	1,172.5	1,621.4	HKG
	4.00	106.7	87.6	89.9	199.1	163.5	167.7	2,163.4	2,469.7	2,785.3	JPN
	4.02	257.1	261.6	297.6	244.6	249.0	283.2	936.0	1,676.3	3,083.9	KOR
	3.77	278.3	238.6	254.3	-	-	-	959.2	1,487.1	2,428.7	TWN
	0.74	290.9	310.1	390.9	125.7	139.8	184.0	181.2	259.3	429.8	
	7.04	571.2	430.8	450.3	520.8	392.8	410.6	1,247.4	1,621.5	1,846.2	BRN
	0.45	416.5	384.7	435.8	157.3	145.3	164.6	142.1	190.5	315.2	IDN
	2.59	333.8	362.3	549.7	201.4	218.6	331.7	463.9	722.2	1,324.1	MYS
	0.42	220.8	260.1	358.7	69.1	81.3	112.2	188.2	168.3	221.0	PHL
	4.89	91.8	203.5	180.2	119.5	264.8	234.4	415.7	734.1	617.3	SGP
	1.10	231.9	267.0	383.7	111.2	128.1	184.0	198.5	396.0	720.3	THA
	4.39	281.8	275.9	229.4	278.7	273.5	227.3	2,837.3	3,021.9	3,398.4	
	5.46	293.8	276.6	225.4	295.3	277.9	226.5	3,507.6	3,705.6	4,285.5	AUS
	4.83	219.1	271.5	262.2	220.1	272.8	263.4	2,345.3	2,947.9	3,473.3	NZL
	0.12	234.7	283.6	133.7	88.0	106.3	50.1	142.9	154.0	69.3	PNG
	7.61	375.2	293.3	247.4	364.8	285.3	240.7	6,318.1	5,915.2	5,571.0	
	8.44	477.6	385.4	365.6	426.5	344.3	326.5	6,372.7	5,923.7	5,959.7	CAN
	7.52	366.4	285.8	238.0	359.1	280.0	233.2	6,312.2	5,914.2	5,528.6	USA
	1.33	391.6	412.9	363.7	189.0	199.6	177.6	827.6	862.3	859.3	
	1.62	369.3	331.6	300.4	229.4	206.0	186.6	742.0	841.5	1,253.3	CHL
	1.52	436.2	461.6	407.7	200.8	212.4	187.6	962.0	1,014.5	937.1	MEX
	0.42	183.9	183.5	181.2	97.9	97.7	96.5	358.7	287.8	335.2	PER
	4.22	-	-	1,618.6	-	-	642.5	-	-	3,059.7	RUS
	0.21	-	-	530.2	-	-	105.2	-	-	163.7	VNM

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	2001	1980	1990	2001
APEC 19	-	-	3,415.9	-	-	1.461
APEC 21	-	-	3,906.8	-	-	1.525
East Asia	659.0	942.3	1,300.8	0.569	0.710	0.882
China	352.2	554.3	780.3	0.359	0.488	0.614
Hong Kong, China	4.0	9.2	9.4	0.793	1.613	1.396
Japan	251.5	287.2	312.1	2.154	2.325	2.456
Republic of Korea	32.8	60.7	135.8	0.861	1.416	2.869
Chinese Taipei	18.5	30.9	63.2	1.038	1.520	2.822
Southeast Asia	-	-	185.2	-	-	0.491
Brunei Darussalam	0.6	1.1	1.4	3.337	4.440	4.099
Indonesia	17.3	37.0	67.9	0.117	0.208	0.325
Malaysia	8.1	15.5	31.6	0.586	0.851	1.329
Philippines	8.2	9.7	18.5	0.171	0.159	0.237
Singapore	2.0	9.1	17.9	0.848	2.998	4.325
Thailand	-	-	47.8	-	-	0.782
Oceania	-	79.0	103.5	-	3.228	3.632
Australia	-	72.3	95.4	-	4.239	4.923
New Zealand	-	6.1	7.8	-	1.767	2.033
Papua New Guinea	0.5	0.6	0.2	0.165	0.159	0.038
North America	1,412.5	1,490.2	1,707.3	5.609	5.375	5.396
Canada	119.1	124.5	142.0	4.844	4.478	4.569
United States of America	1,293.4	1,365.7	1,565.3	5.692	5.475	5.486
Latin America	76.5	92.0	119.2	0.797	0.780	0.844
Chile	7.8	9.8	14.8	0.697	0.749	0.964
Mexico	63.0	76.8	97.4	0.932	0.923	0.980
Peru	5.7	5.4	7.0	0.332	0.250	0.264
Russia	-	-	477.6	-	-	3.299
Viet Nam	-	-	13.3	-	-	0.167

=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	2001	1980	1990	2001	1980	1990	2001	
-	-	176.0	-	-	154.5	-	-	0.745	
-	-	197.2	-	-	168.3	-	-	0.749	
175.3	158.0	164.6	237.8	188.5	144.6	0.804	0.787	0.819	
2,152.5	1,394.0	698.5	500.5	324.1	162.4	0.881	0.892	0.988	CHN
70.3	85.7	57.0	73.1	89.1	59.2	0.755	0.864	0.620	HKG
76.1	58.2	55.3	142.0	108.6	103.1	0.713	0.664	0.615	JPN
220.1	177.7	212.5	209.4	169.1	202.2	0.856	0.679	0.714	KOR
216.9	169.5	190.1	216.9	169.5	190.1	0.780	0.710	0.748	TWN
-	-	260.2	-	-	122.5	-	-	0.666	
113.4	237.3	262.2	103.4	216.4	239.1	0.198	0.551	0.582	BRN
232.1	267.2	314.1	87.6	100.9	118.6	0.557	0.695	0.721	IDN
255.0	274.0	282.3	153.9	165.3	170.3	0.764	0.756	0.514	MYS
145.5	146.1	203.3	45.5	45.7	63.6	0.659	0.562	0.567	PHL
77.1	170.1	159.5	100.3	221.4	207.5	0.839	0.836	0.885	SGP
-	-	273.7	-	-	131.3	-	-	0.713	THA
-	211.8	189.9	-	209.9	188.1	-	0.767	0.828	
-	227.5	203.4	-	228.6	204.4	-	0.823	0.902	AUS
-	116.3	110.3	-	116.8	110.8	-	0.428	0.421	NZL
189.3	207.1	43.0	71.0	77.6	16.1	0.807	0.730	0.322	PNG
272.8	211.2	175.4	265.2	205.5	170.7	0.727	0.720	0.709	
292.9	232.9	198.0	261.6	208.0	176.8	0.613	0.604	0.542	CAN
271.0	209.5	173.7	265.6	205.2	170.2	0.740	0.733	0.730	USA
258.5	263.4	231.2	124.8	127.3	112.9	0.660	0.638	0.636	
261.6	228.2	179.0	162.5	141.8	111.2	0.708	0.688	0.596	CHL
284.1	289.5	262.0	130.7	133.2	120.6	0.651	0.627	0.643	MEX
129.2	131.3	114.2	68.8	69.9	60.8	0.702	0.715	0.631	PER
-	-	1,264.0	-	-	501.8	-	-	0.781	RUS
-	-	429.1	-	-	85.1	-	-	0.809	VNM

Energy Indicators

Glossary

General note

For editing convenience the definition for some items with “++” mark are different with APEC Energy Statistics 2001. In the Energy Balance sector the definition for all item are same as APEC Energy Statistics 2001.

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

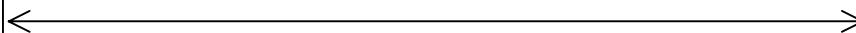
Mogas is light hydrocarbon oil for use in internal engines such as motor vehicles, excluding aircraft. Motor gasoline is distilled between 35 °C and 215 °C and treated by reforming, catalytic cracking or blending with aromatic fraction to reach a sufficiently high octane number (≥80 RON).

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.

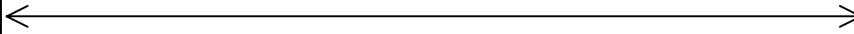
Total final energy consumption

Defined as residential and commercial plus industry plus transport 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.