



Asia-Pacific  
Economic Cooperation

# APEC ENERGY HANDBOOK 2000

**Energy Working Group  
October 2002**

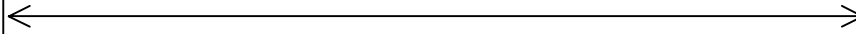
Coordinating Agency:  
**The Energy Data and Modelling Center  
The Institute of Energy Economics, Japan**



**Asia-Pacific  
Economic Cooperation**

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## Preface

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APEC Energy Handbook 2000 is a handy, pocket-sized summary of key energy data and a supplement to APEC Energy Statistics 2000 which has been released at October 2002 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 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 (Address: 13-1, Kachidoki 1, Chuo-ku, Tokyo 104-0054, Japan; Telephone: +81-3-5547-0215; Facsimile: +81-3-5547-0226; E-mail: [wwwadmin@ieej.or.jp](mailto:wwwadmin@ieej.or.jp); Web: <http://www.ieej.or.jp/apec/>).

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## Definition of Region

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	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							

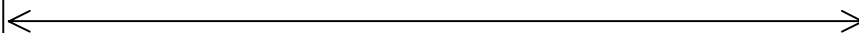
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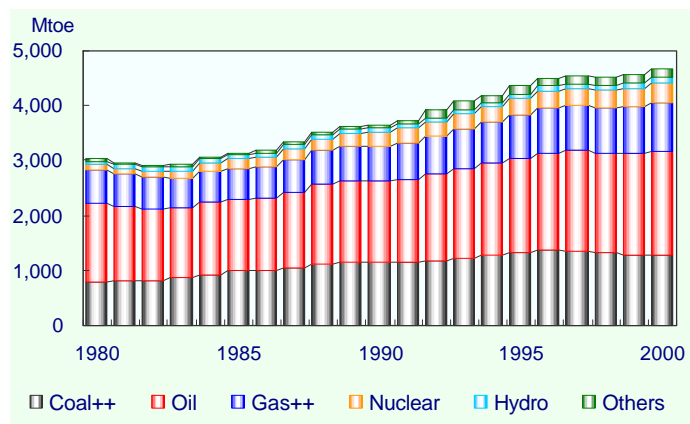
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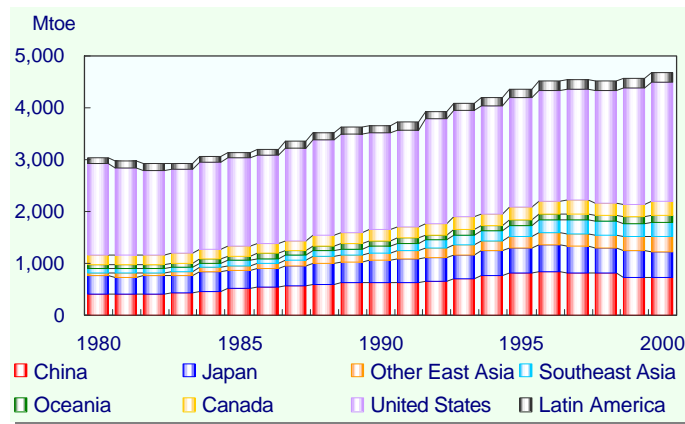
### Total Primary Energy Supply by Energy APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	800	1,140	1,328	1,338	1,272	1,278
Oil	1,425	1,496	1,710	1,811	1,865	1,894
Gas++	604	638	785	807	846	893
Nuclear	99	242	307	317	333	344
Hydro	65	79	92	95	94	94
Others	35	51	132	145	162	162
<b>Total</b>	<b>3,029</b>	<b>3,646</b>	<b>4,353</b>	<b>4,514</b>	<b>4,573</b>	<b>4,665</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	26.4	31.3	30.5	29.6	27.8	27.4
Oil	47.0	41.0	39.3	40.1	40.8	40.6
Gas++	20.0	17.5	18.0	17.9	18.5	19.1
Nuclear	3.3	6.6	7.0	7.0	7.3	7.4
Hydro	2.2	2.2	2.1	2.1	2.1	2.0
Others	1.1	1.4	3.0	3.2	3.6	3.5

### Total Primary Energy Supply by Region APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
China	400	621	811	801	725	718
Japan	353	433	491	499	511	509
Other East Asia	67	142	219	247	267	280
Southeast Asia	72	134	216	253	253	278
Oceania	79	103	113	122	126	130
Canada	194	206	241	244	255	264
United States	1,749	1,864	2,105	2,171	2,254	2,296
Latin America	116	144	158	177	181	190
<b>APEC 19</b>	<b>3,029</b>	<b>3,646</b>	<b>4,353</b>	<b>4,514</b>	<b>4,573</b>	<b>4,665</b>

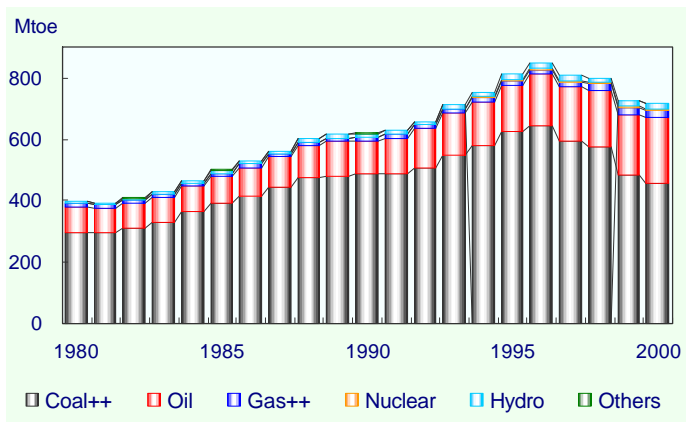
	Share (%)					
	1980	1990	1995	1998	1999	2000
China	13.2	17.0	18.6	17.7	15.8	15.4
Japan	11.6	11.9	11.3	11.1	11.2	10.9
Other East Asia	2.2	3.9	5.0	5.5	5.8	6.0
Southeast Asia	2.4	3.7	5.0	5.6	5.5	6.0
Oceania	2.6	2.8	2.6	2.7	2.8	2.8
Canada	6.4	5.6	5.5	5.4	5.6	5.6
United States	57.7	51.1	48.3	48.1	49.3	49.2
Latin America	3.8	4.0	3.6	3.9	4.0	4.1

Primary Energy Supply

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### Total Primary Energy Supply by Energy China

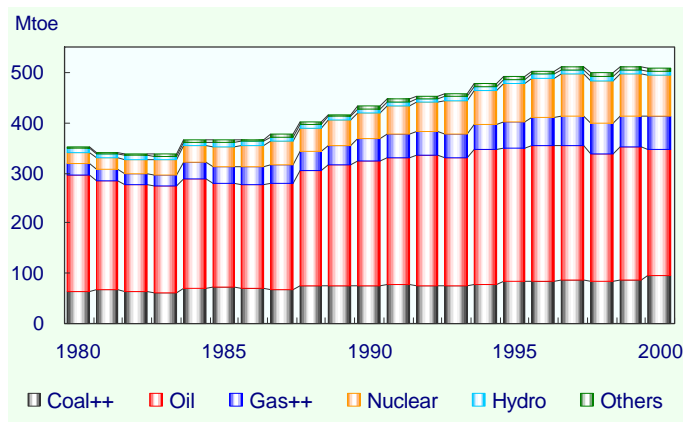


	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	297	487	626	575	484	458
Oil	84	109	150	185	198	214
Gas++	12.0	12.8	15.0	19.5	21.1	22.8
Nuclear	-	-	3.3	3.7	3.9	4.4
Hydro	5.1	10.9	16.4	17.9	17.5	19.1
Others	1.9	2.3	-0.5	-0.6	0.3	0.1
<b>Total</b>	<b>400</b>	<b>621</b>	<b>811</b>	<b>801</b>	<b>725</b>	<b>718</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	74.4	78.3	77.2	71.8	66.8	63.7
Oil	20.9	17.5	18.5	23.1	27.3	29.8
Gas++	3.0	2.1	1.9	2.4	2.9	3.2
Nuclear	-	-	0.4	0.5	0.5	0.6
Hydro	1.3	1.8	2.0	2.2	2.4	2.7
Others	0.5	0.4	-0.1	-0.1	0.0	0.0



### Total Primary Energy Supply by Energy Japan



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	63.6	75.6	82.8	85.0	87.8	94.3
Oil	234	249	267	254	264	253
Gas++	21.8	43.5	52.0	59.7	62.3	64.7
Nuclear	21.5	51.0	75.0	85.3	82.8	83.3
Hydro	7.8	7.8	7.1	8.6	7.6	7.5
Others	4.3	5.5	6.4	6.8	6.6	6.7
<b>Total</b>	<b>353</b>	<b>433</b>	<b>491</b>	<b>499</b>	<b>511</b>	<b>509</b>

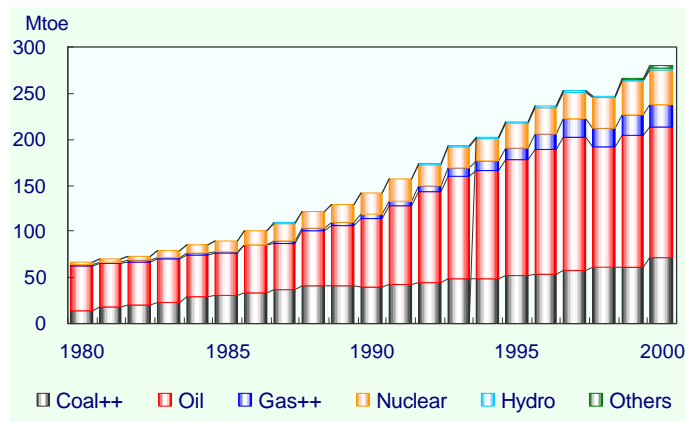
	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	18.0	17.5	16.9	17.0	17.2	18.5
Oil	66.3	57.6	54.5	50.8	51.7	49.7
Gas++	6.2	10.1	10.6	12.0	12.2	12.7
Nuclear	6.1	11.8	15.3	17.1	16.2	16.4
Hydro	2.2	1.8	1.5	1.7	1.5	1.5
Others	1.2	1.3	1.3	1.4	1.3	1.3

Primary Energy Supply

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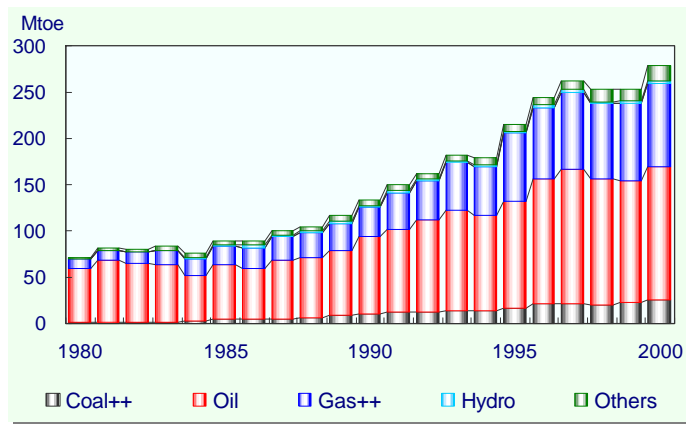
### Total Primary Energy Supply by Energy Other East Asia



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	14.1	39.3	51.4	60.6	61.5	71.9
Oil	47.9	75.5	127.4	131.8	142.2	141.0
Gas++	1.4	4.3	12.0	19.8	22.6	24.6
Nuclear	3.1	22.3	26.7	33.0	36.9	38.4
Hydro	0.3	0.8	1.2	1.4	1.3	1.2
Others	-0.0	-0.2	0.5	0.6	2.6	2.9
<b>Total</b>	<b>66.6</b>	<b>142.0</b>	<b>219.1</b>	<b>247.2</b>	<b>267.1</b>	<b>280.1</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	21.1	27.7	23.5	24.5	23.0	25.7
Oil	71.9	53.2	58.1	53.3	53.2	50.3
Gas++	2.1	3.0	5.5	8.0	8.5	8.8
Nuclear	4.6	15.7	12.2	13.3	13.8	13.7
Hydro	0.4	0.5	0.6	0.6	0.5	0.4
Others	-0.0	-0.1	0.2	0.2	1.0	1.0

### Total Primary Energy Supply by Energy Southeast Asia



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	0.9	10.3	16.6	19.9	23.4	25.2
Oil	58.3	84.2	115.9	135.7	130.4	144.5
Gas++	9.9	31.4	73.0	81.7	84.1	89.4
Nuclear	-	-	-	-	-	-
Hydro	0.9	2.2	2.8	2.5	2.7	2.7
Others	1.9	5.7	7.5	13.2	12.8	16.4
<b>Total</b>	<b>71.9</b>	<b>133.7</b>	<b>215.8</b>	<b>252.9</b>	<b>253.4</b>	<b>278.1</b>

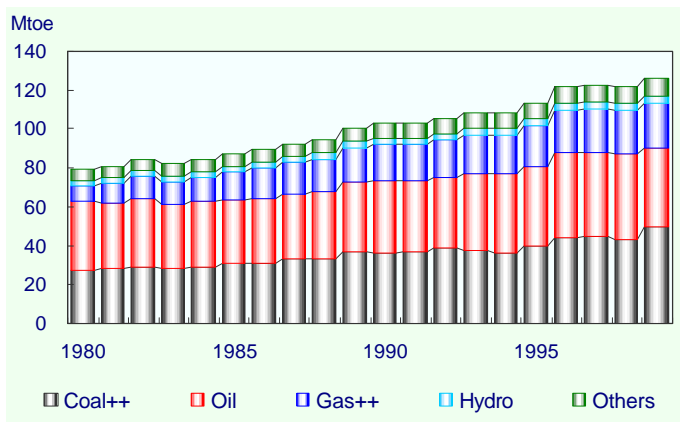
	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	1.3	7.7	7.7	7.9	9.2	9.1
Oil	81.1	62.9	53.7	53.7	51.5	52.0
Gas++	13.8	23.5	33.8	32.3	33.2	32.1
Nuclear	-	-	-	-	-	-
Hydro	1.2	1.7	1.3	1.0	1.1	1.0
Others	2.6	4.3	3.5	5.2	5.1	5.9

Primary Energy Supply

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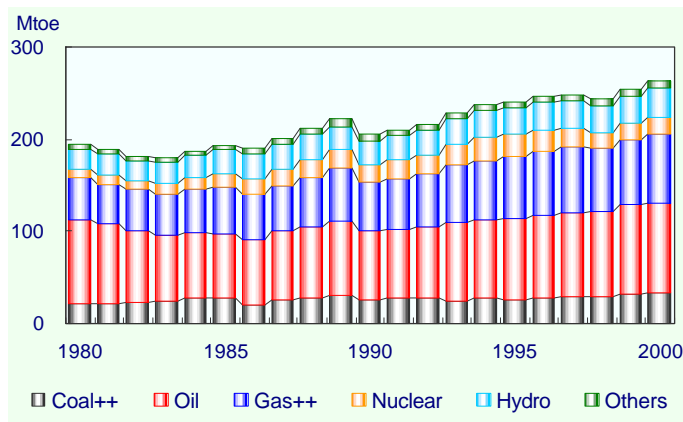
### Total Primary Energy Supply by Energy Oceania



	1980	1990	1995	1998	1999	2000
Coal++	27.5	36.3	40.0	43.7	49.5	49.1
Oil	34.9	37.2	40.7	43.3	40.6	42.7
Gas++	8.6	18.8	20.8	22.7	23.3	24.7
Nuclear	-	-	-	-	-	-
Hydro	2.9	3.3	3.8	3.6	3.5	3.6
Others	5.5	7.4	8.0	9.0	9.3	10.0
<b>Total</b>	<b>79.4</b>	<b>103.0</b>	<b>113.3</b>	<b>122.3</b>	<b>126.2</b>	<b>130.1</b>

	1980	1990	1995	1998	1999	2000
Coal++	34.7	35.3	35.3	35.7	39.2	37.7
Oil	44.0	36.1	35.9	35.4	32.2	32.8
Gas++	10.8	18.2	18.4	18.6	18.5	19.0
Nuclear	-	-	-	-	-	-
Hydro	3.6	3.2	3.4	2.9	2.8	2.8
Others	7.0	7.2	7.1	7.4	7.4	7.7

### Total Primary Energy Supply by Energy Canada



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	21.3	26.3	26.5	29.3	32.5	33.4
Oil	90.9	73.8	88.0	92.8	96.6	97.1
Gas++	45.9	54.3	67.1	68.1	70.0	75.2
Nuclear	9.4	17.9	24.1	17.6	18.1	19.0
Hydro	21.8	25.5	28.9	28.6	29.4	30.8
Others	5.1	8.1	6.7	7.8	8.4	8.1
<b>Total</b>	<b>194.2</b>	<b>206.0</b>	<b>241.2</b>	<b>244.1</b>	<b>254.9</b>	<b>263.5</b>

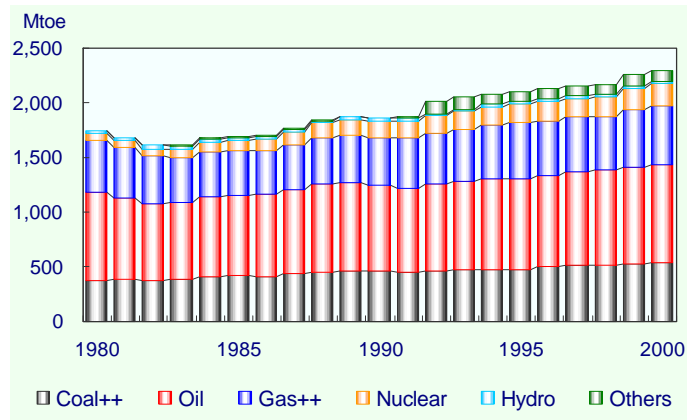
	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	11.0	12.8	11.0	12.0	12.7	12.7
Oil	46.8	35.8	36.5	38.0	37.9	36.8
Gas++	23.6	26.4	27.8	27.9	27.5	28.5
Nuclear	4.8	8.7	10.0	7.2	7.1	7.2
Hydro	11.2	12.4	12.0	11.7	11.5	11.7
Others	2.6	3.9	2.8	3.2	3.3	3.1

Primary Energy Supply

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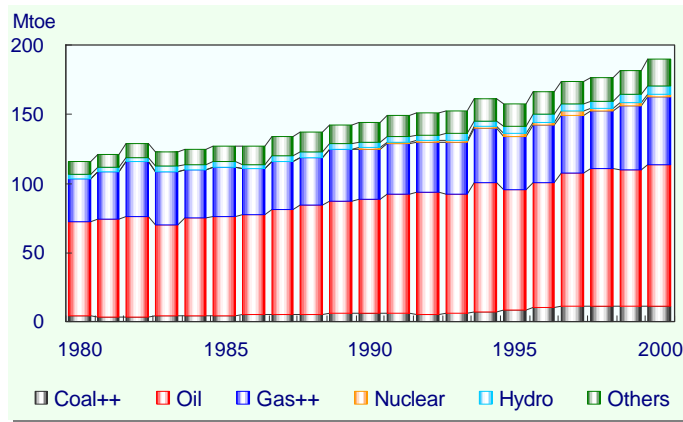
### Total Primary Energy Supply by Energy United States of America



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	372	459	476	513	522	536
Oil	808	786	833	869	894	899
Gas++	473	435	506	495	517	543
Nuclear	65.4	150	175	176	189	196
Hydro	24.0	24.3	26.5	27.4	26.9	23.5
Others	6.3	8.1	87.6	91.4	105.3	98.4
<b>Total</b>	<b>1,749</b>	<b>1,864</b>	<b>2,105</b>	<b>2,171</b>	<b>2,254</b>	<b>2,296</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	21.3	24.7	22.6	23.6	23.2	23.3
Oil	46.2	42.2	39.6	40.0	39.7	39.2
Gas++	27.1	23.4	24.1	22.8	22.9	23.6
Nuclear	3.7	8.1	8.3	8.1	8.4	8.6
Hydro	1.4	1.3	1.3	1.3	1.2	1.0
Others	0.4	0.4	4.2	4.2	4.7	4.3

### Total Primary Energy Supply by Energy Latin America



	Mtoe					
	1980	1990	1995	1998	1999	2000
Coal++	3.9	6.2	8.2	10.9	11.0	10.7
Oil	68.1	81.8	87.3	100.0	99.2	102.7
Gas++	31.5	37.3	38.7	41.4	46.0	48.6
Nuclear	-	0.8	2.2	2.4	2.6	2.1
Hydro	2.7	3.7	5.1	4.7	5.4	5.9
Others	9.8	14.5	16.2	17.2	17.2	20.0
<b>Total</b>	<b>115.9</b>	<b>144.2</b>	<b>157.5</b>	<b>176.5</b>	<b>181.3</b>	<b>190.0</b>

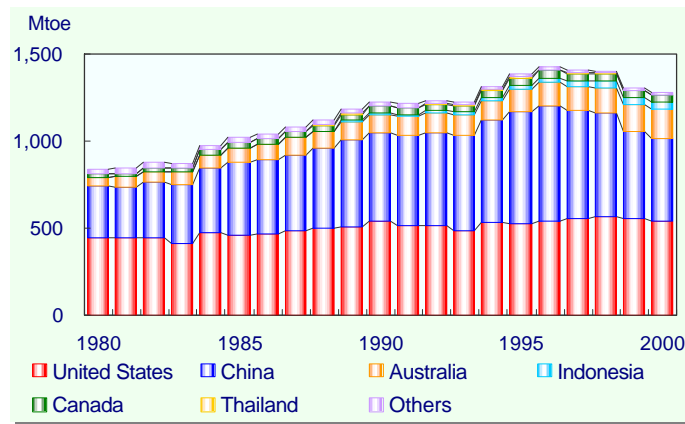
	Share (%)					
	1980	1990	1995	1998	1999	2000
Coal++	3.4	4.3	5.2	6.2	6.0	5.7
Oil	58.7	56.7	55.4	56.6	54.7	54.0
Gas++	27.2	25.9	24.6	23.4	25.4	25.6
Nuclear	-	0.5	1.4	1.4	1.4	1.1
Hydro	2.3	2.5	3.2	2.7	3.0	3.1
Others	8.4	10.1	10.3	9.7	9.5	10.5

Primary Energy Supply

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### Indigenous Production of Coal APEC 19



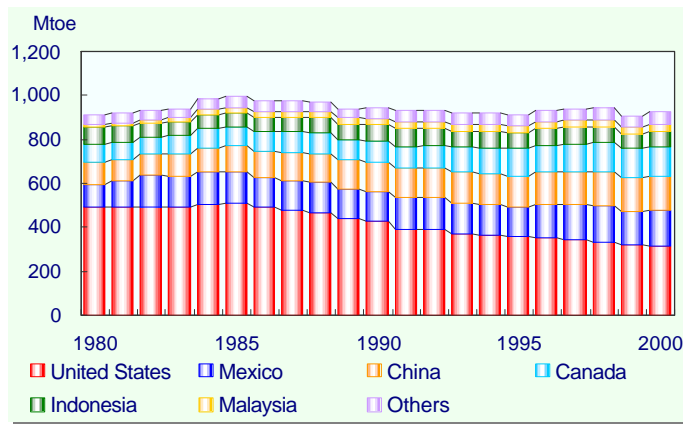
	Mtoe					
	1980	1990	1995	1998	1999	2000
United States	445	538	526	568	559	542
China	295	513	646	594	496	474
Australia	52	106	129	148	153	168
Indonesia	0.2	5.8	24.0	35.6	42.2	44.0
Canada	20.2	37.9	40.9	40.0	36.1	34.3
Thailand	0.4	3.6	5.5	6.1	5.8	5.2
Others	25.9	20.5	13.8	12.1	11.9	12.3
<b>APEC 19</b>	<b>838</b>	<b>1,225</b>	<b>1,385</b>	<b>1,403</b>	<b>1,305</b>	<b>1,280</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
United States	53.1	43.9	38.0	40.5	42.8	42.3
China	35.1	41.9	46.7	42.3	38.0	37.0
Australia	6.2	8.7	9.3	10.5	11.8	13.1
Indonesia	0.0	0.5	1.7	2.5	3.2	3.4
Canada	2.4	3.1	2.9	2.8	2.8	2.7
Thailand	0.0	0.3	0.4	0.4	0.4	0.4
Others	3.1	1.7	1.0	0.9	0.9	1.0

Coal: Hard Coal, Anthracite and Lignite



### Indigenous Production of Crude Oil APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
United States	491	425	355	335	319	315
Mexico	103	139	136	160	155	161
China	101	132	142	153	152	155
Canada	85	100	123	135	132	136
Indonesia	77	71	73	71	66	69
Malaysia	14	31	35	36	33	31
Others	45	51	51	52	48	55
<b>APEC 19</b>	<b>915</b>	<b>947</b>	<b>916</b>	<b>942</b>	<b>905</b>	<b>923</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
United States	53.7	44.8	38.8	35.5	35.3	34.2
Mexico	11.2	14.6	14.9	17.0	17.1	17.5
China	11.0	13.9	15.5	16.2	16.8	16.8
Canada	9.3	10.5	13.4	14.3	14.6	14.8
Indonesia	8.4	7.5	8.0	7.6	7.3	7.5
Malaysia	1.5	3.2	3.8	3.8	3.6	3.3
Others	4.9	5.4	5.5	5.6	5.4	5.9

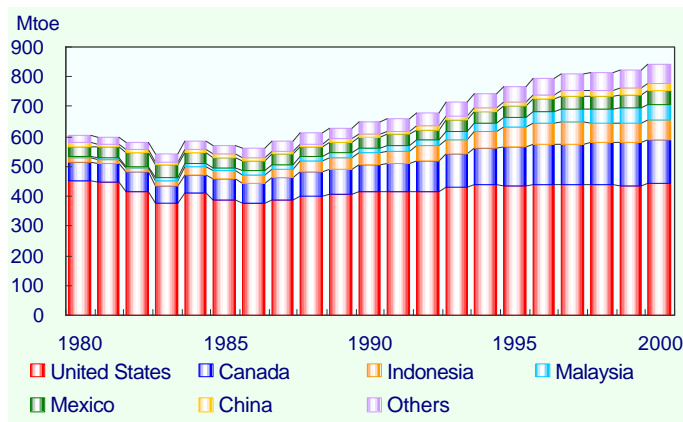
Crude Oil includes NGL and condensate

Primary Energy Supply

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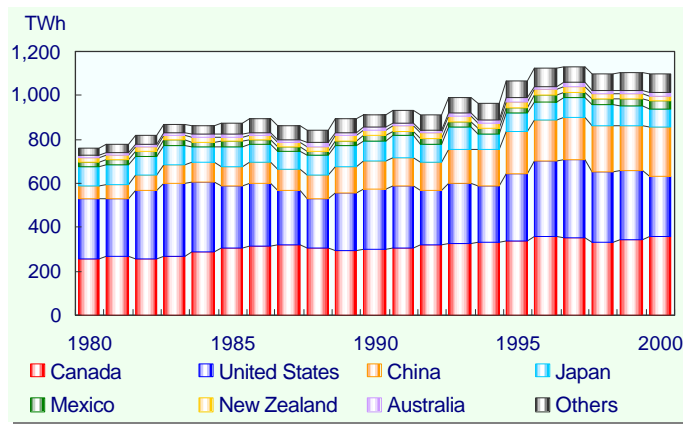
### Indigenous Production of Natural Gas APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
United States	452	416	433	437	434	441
Canada	63.6	88.2	130	142	144	149
Indonesia	14.8	41.0	68.0	67.6	69.6	65.8
Malaysia	2.3	15.5	33.3	45.1	47.8	52.4
Mexico	35.1	35.3	36.2	44.3	44.9	44.1
China	12.0	12.8	15.0	19.5	21.1	22.8
Others	23.5	39.8	53.2	60.6	61.9	66.0
<b>APEC 19</b>	<b>603</b>	<b>649</b>	<b>769</b>	<b>816</b>	<b>823</b>	<b>841</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
United States	74.9	64.2	56.3	53.6	52.7	52.5
Canada	10.6	13.6	16.9	17.4	17.5	17.7
Indonesia	2.5	6.3	8.8	8.3	8.5	7.8
Malaysia	0.4	2.4	4.3	5.5	5.8	6.2
Mexico	5.8	5.4	4.7	5.4	5.4	5.2
China	2.0	2.0	2.0	2.4	2.6	2.7
Others	3.9	6.1	6.9	7.4	7.5	7.8

### Indigenous Production of Hydro Power APEC 19

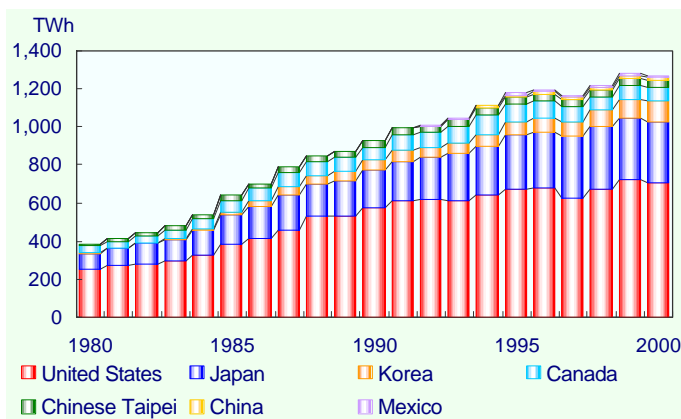


	TWh					
	1980	1990	1995	1998	1999	2000
Canada	253.2	296.8	336.0	332.0	345.6	358.4
United States	276.0	279.9	308.4	318.9	313.4	273.1
China	59.2	126.7	190.6	208.0	203.8	222.4
Japan	91.0	91.0	82.8	99.6	88.4	87.0
Mexico	16.7	23.3	27.5	24.7	32.7	33.1
New Zealand	19.2	23.0	27.3	24.1	23.2	24.0
Australia	13.8	14.9	16.2	16.1	16.8	17.1
Others	29.2	59.6	78.9	76.1	77.9	81.1
<b>APEC 19</b>	<b>758.4</b>	<b>915.3</b>	<b>1,067.8</b>	<b>1,099.5</b>	<b>1,101.8</b>	<b>1,096.3</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Canada	33.4	32.4	31.5	30.2	31.4	32.7
United States	36.4	30.6	28.9	29.0	28.4	24.9
China	7.8	13.8	17.8	18.9	18.5	20.3
Japan	12.0	9.9	7.8	9.1	8.0	7.9
Mexico	2.2	2.5	2.6	2.2	3.0	3.0
New Zealand	2.5	2.5	2.6	2.2	2.1	2.2
Australia	1.8	1.6	1.5	1.5	1.5	1.6
Others	3.9	6.5	7.4	6.9	7.1	7.4

Primary Energy Supply

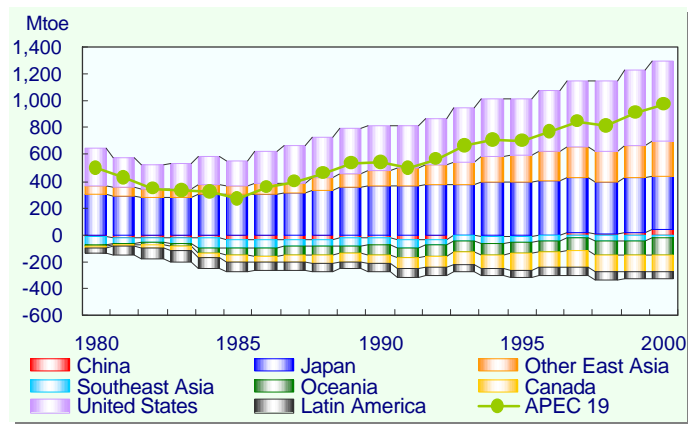
### Indigenous Production of Nuclear Power APEC 19



	TWh					
	1980	1990	1995	1998	1999	2000
United States	251.1	576.9	673.4	673.7	725.0	705.4
Japan	82.6	195.8	286.9	327.3	317.7	319.8
Korea	3.5	52.9	67.0	89.7	103.1	109.0
Canada	35.9	68.8	92.3	67.5	69.3	72.8
Chinese Taipei	8.2	32.9	35.3	36.8	38.4	38.5
China	-	-	12.8	14.1	14.9	16.7
Mexico	-	2.9	8.4	9.3	10.0	8.2
Others	-	-	-	-	-	-
<b>APEC 19</b>	<b>381.3</b>	<b>930.2</b>	<b>1,176.2</b>	<b>1,218.4</b>	<b>1,278.5</b>	<b>1,270.4</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
United States	65.9	62.0	57.3	55.3	56.7	55.5
Japan	21.7	21.0	24.4	26.9	24.8	25.2
Korea	0.9	5.7	5.7	7.4	8.1	8.6
Canada	9.4	7.4	7.8	5.5	5.4	5.7
Chinese Taipei	2.2	3.5	3.0	3.0	3.0	3.0
China	-	-	1.1	1.2	1.2	1.3
Mexico	-	0.3	0.7	0.8	0.8	0.6
Others	-	-	-	-	-	-

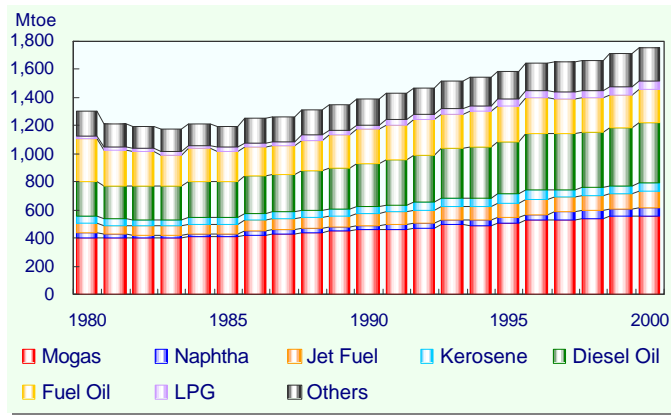
### Net Import by Region APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
Australia	-18.3	-65.3	-88.5	-107.3	-109.4	-125.0
Brunei Darussalam	-17.4	-12.9	-14.6	-13.4	-14.4	-15.3
Canada	-11.0	-68.4	-119.2	-127.8	-120.1	-124.1
Chile	4.1	7.0	10.7	14.2	17.8	17.8
China	-18.6	-29.0	-8.4	8.3	19.6	34.5
Hong Kong, China	6.0	10.8	14.3	17.7	20.3	18.2
Indonesia	-60.7	-65.9	-85.2	-91.0	-92.2	-82.4
Japan	303.2	361.6	394.0	389.4	406.7	406.9
Korea	29.6	69.5	130.8	139.0	150.6	162.7
Malaysia	-5.0	-25.9	-28.3	-26.4	-28.7	-25.8
Mexico	-46.9	-65.7	-62.9	-75.6	-71.6	-71.5
New Zealand	4.0	2.2	2.9	3.3	3.7	3.5
Papua New Guinea	0.6	-3.7	-4.0	-2.9	-3.2	-0.9
Peru	-3.0	-0.6	1.8	2.6	2.2	3.3
Philippines	10.4	11.4	16.9	18.7	19.5	20.1
Singapore	7.1	24.0	32.3	40.1	38.8	40.4
Chinese Taipei	19.4	37.0	55.7	66.3	71.3	77.5
Thailand	12.0	18.0	32.6	31.4	33.5	34.6
United States	289	335	419	532	561	595
APEC 19	504	539	700	818	905	970

Primary Energy Supply

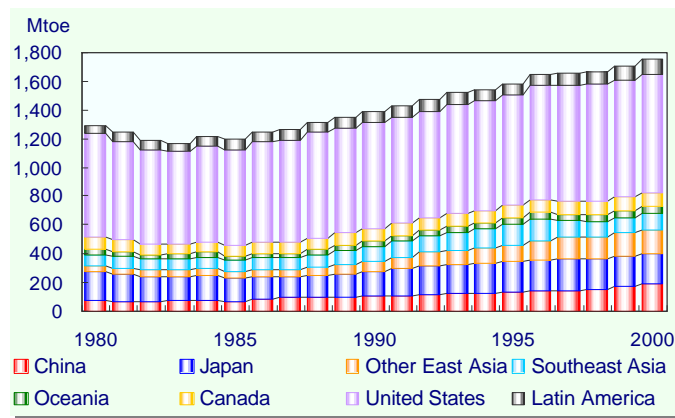
## Refining of Petroleum Products by Fuel APEC 19



	1980	1990	1995	1998	1999	Mtoe 2000
Mogas	406	458	511	541	555	562
Naphtha	33	30	41	51	50	50
Jet Fuel	68	92	96	111	113	117
Kerosene	47	52	62	56	60	61
Diesel Oil	248	303	372	399	408	430
Fuel Oil	303	238	260	240	237	234
LPG	23	33	44	48	56	60
Others	171	188	196	220	229	235
<b>Total</b>	<b>1,297</b>	<b>1,393</b>	<b>1,583</b>	<b>1,666</b>	<b>1,707</b>	<b>1,749</b>

	1980	1990	1995	1998	1999	Share (%) 2000
Mogas	31.3	32.9	32.3	32.5	32.5	32.1
Naphtha	2.5	2.1	2.6	3.1	2.9	2.9
Jet Fuel	5.2	6.6	6.1	6.7	6.6	6.7
Kerosene	3.6	3.7	3.9	3.3	3.5	3.5
Diesel Oil	19.1	21.8	23.5	24.0	23.9	24.6
Fuel Oil	23.3	17.1	16.4	14.4	13.9	13.4
LPG	1.7	2.4	2.8	2.9	3.3	3.4
Others	13.2	13.5	12.4	13.2	13.4	13.4

### Refining of Petroleum Products by Region APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
China	74	102	134	155	169	188
Japan	204	178	212	214	218	216
Other East Asia	39	62	118	147	156	160
Southeast Asia	76	109	142	111	113	116
Oceania	33	37	42	43	43	43
Canada	95	88	88	94	96	98
United States	715	739	770	817	814	829
Latin America	61	77	78	85	99	98
<b>APEC 19</b>	<b>1,297</b>	<b>1,393</b>	<b>1,583</b>	<b>1,666</b>	<b>1,707</b>	<b>1,749</b>

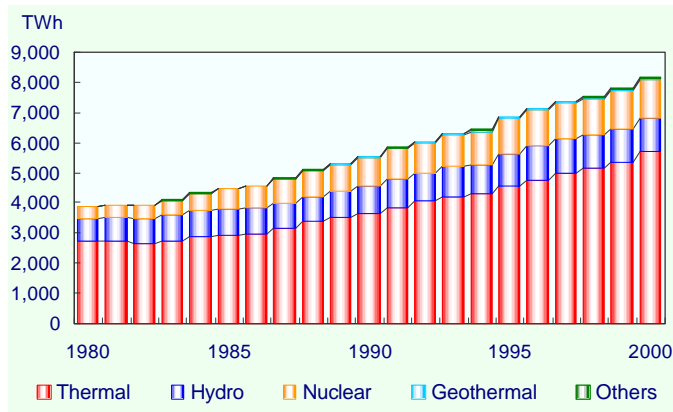
	Share (%)					
	1980	1990	1995	1998	1999	2000
China	5.7	7.3	8.4	9.3	9.9	10.8
Japan	15.7	12.8	13.4	12.8	12.7	12.4
Other East Asia	3.0	4.5	7.4	8.8	9.1	9.2
Southeast Asia	5.9	7.9	9.0	6.7	6.6	6.6
Oceania	2.6	2.6	2.6	2.6	2.5	2.5
Canada	7.3	6.3	5.6	5.7	5.6	5.6
United States	55.1	53.0	48.6	49.1	47.7	47.4
Latin America	4.7	5.5	4.9	5.1	5.8	5.6

Transformation

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=66x48+231+162

### Electricity Power Generation by Type APEC 19



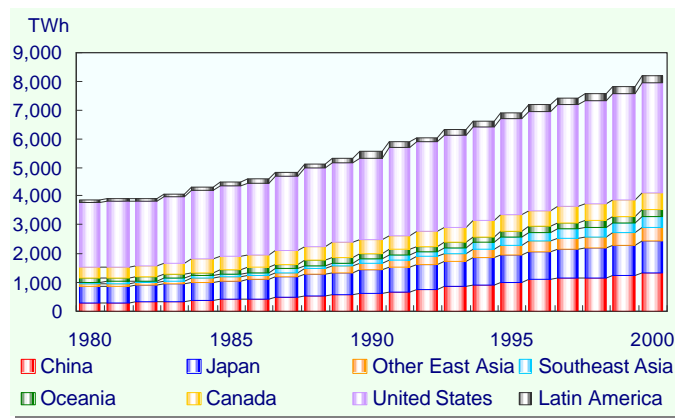
	TWh					
	1980	1990	1995	1998	1999	2000
Thermal	2,726.8	3,651.0	4,572.4	5,148.8	5,341.8	5,707.2
Hydro	758.4	915.3	1,067.8	1,096.6	1,099.1	1,096.3
Nuclear	383.4	930.2	1,176.2	1,218.4	1,282.6	1,270.4
Geothermal	10.3	23.8	33.6	39.1	42.7	42.2
Others	6.3	16.7	25.0	31.9	30.0	69.4
<b>Total</b>	<b>3,885.3</b>	<b>5,537.0</b>	<b>6,875.0</b>	<b>7,534.8</b>	<b>7,796.2</b>	<b>8,185.4</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Thermal	70.2	65.9	66.5	68.3	68.5	69.7
Hydro	19.5	16.5	15.5	14.6	14.1	13.4
Nuclear	9.9	16.8	17.1	16.2	16.5	15.5
Geothermal	0.3	0.4	0.5	0.5	0.5	0.5
Others	0.2	0.3	0.4	0.4	0.4	0.8

"Others" comprises power generated from renewable energy.



### Electricity Power Generation by Region APEC 19

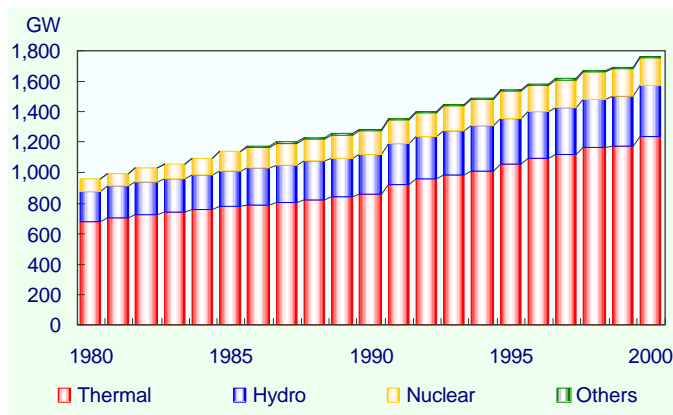


	TWh					
	1980	1990	1995	1998	1999	2000
China	301.6	621.2	1,007.7	1,166.2	1,239.3	1,355.6
Japan	565.4	833.6	962.1	1,028.4	1,040.3	1,073.8
Other East Asia	92.5	223.7	335.5	409.9	438.3	482.6
Southeast Asia	59.6	147.6	266.5	328.0	340.3	373.9
Oceania	118.2	185.2	210.1	234.6	241.6	242.3
Canada	377.2	477.9	554.5	559.1	573.9	605.2
United States	2,286.4	2,808.2	3,370.4	3,610.4	3,707.6	3,799.9
Latin America	83.7	239.7	187.2	225.1	238.4	252.0
<b>APEC 19</b>	<b>3,885.3</b>	<b>5,537.0</b>	<b>6,875.0</b>	<b>7,534.8</b>	<b>7,796.2</b>	<b>8,185.4</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
China	7.8	11.2	14.7	15.5	15.9	16.6
Japan	14.6	15.1	14.0	13.6	13.3	13.1
Other East Asia	2.4	4.0	4.9	5.4	5.6	5.9
Southeast Asia	1.5	2.7	3.9	4.4	4.4	4.6
Oceania	3.0	3.3	3.1	3.1	3.1	3.0
Canada	9.7	8.6	8.1	7.4	7.4	7.4
United States	58.8	50.7	49.0	47.9	47.6	46.4
Latin America	2.2	4.3	2.7	3.0	3.1	3.1

Transformation

### Power Generation Capacity by Type APEC 19



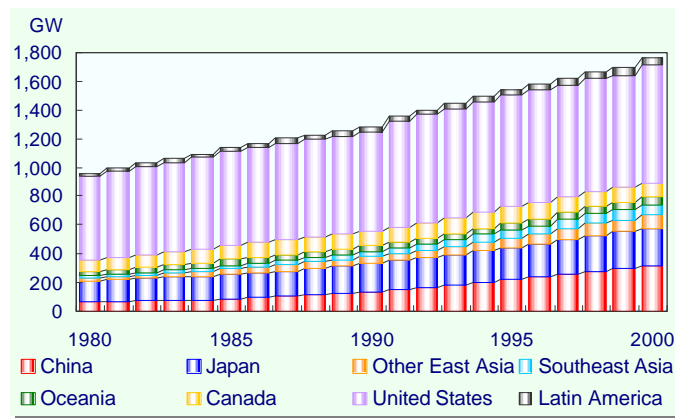
	1980	1990	1995	1998	1999	GW 2000
Thermal	676.2	860.1	1,056.6	1,166.7	1,174.8	1,239.0
Hydro	204.9	259.8	304.5	317.3	327.1	334.7
Nuclear	75.2	157.8	174.1	176.1	180.9	180.8
Others	1.9	5.2	9.3	9.5	9.3	10.2
<b>Total</b>	<b>958.2</b>	<b>1,282.8</b>	<b>1,544.5</b>	<b>1,669.5</b>	<b>1,692.1</b>	<b>1,764.7</b>

	1980	1990	1995	1998	1999	Share (%) 2000
Thermal	70.6	67.0	68.4	69.9	69.4	70.2
Hydro	21.4	20.3	19.7	19.0	19.3	19.0
Nuclear	7.9	12.3	11.3	10.5	10.7	10.2
Others	0.2	0.4	0.6	0.6	0.5	0.6

"Others" comprises power generated from renewable energy.

### Power Generation Capacity by Region APEC 19



	GW					
	1980	1990	1995	1998	1999	2000
China	65.9	137.9	217.2	277.3	298.8	319.3
Japan	143.7	194.7	227.0	250.3	253.5	258.8
Other East Asia	21.8	46.2	64.2	80.5	84.0	87.4
Southeast Asia	15.0	34.5	55.4	70.8	71.8	75.1
Oceania	30.6	42.6	46.5	48.0	50.1	49.8
Canada	82.0	102.9	115.5	109.9	105.9	102.5
United States	578.6	690.5	775.6	784.5	776.6	818.6
Latin America	20.7	33.5	43.1	48.3	51.3	53.1
<b>APEC 19</b>	<b>958.2</b>	<b>1,282.8</b>	<b>1,544.5</b>	<b>1,669.5</b>	<b>1,692.1</b>	<b>1,764.7</b>

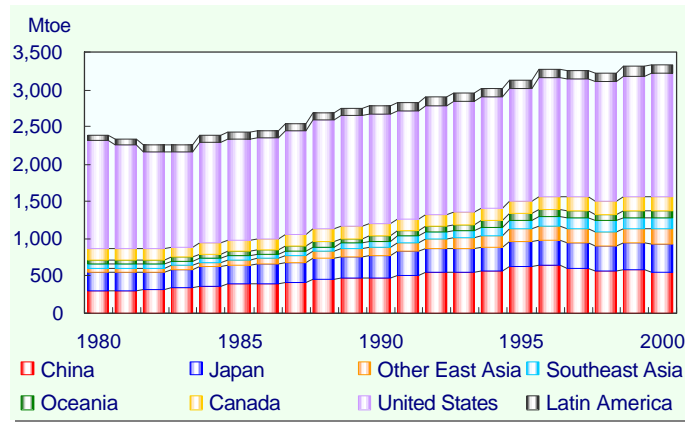
	Share (%)					
	1980	1990	1995	1998	1999	2000
China	6.9	10.7	14.1	16.6	17.7	18.1
Japan	15.0	15.2	14.7	15.0	15.0	14.7
Other East Asia	2.3	3.6	4.2	4.8	5.0	5.0
Southeast Asia	1.6	2.7	3.6	4.2	4.2	4.3
Oceania	3.2	3.3	3.0	2.9	3.0	2.8
Canada	8.6	8.0	7.5	6.6	6.3	5.8
United States	60.4	53.8	50.2	47.0	45.9	46.4
Latin America	2.2	2.6	2.8	2.9	3.0	3.0

Transformation

=6x48+231+0

=66x48+231+162

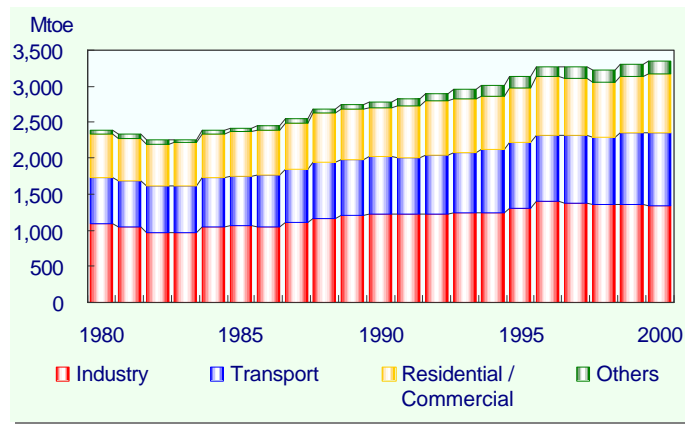
## Total Final Energy Consumption by Region APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
China	301	469	618	563	576	553
Japan	253	305	340	347	360	363
Other East Asia	56	107	165	183	198	206
Southeast Asia	47	82	128	142	150	158
Oceania	59	74	83	90	90	88
Canada	157	165	178	183	189	192
United States	1,434	1,475	1,497	1,587	1,622	1,650
Latin America	79	102	114	124	124	125
<b>APEC 19</b>	<b>2,386</b>	<b>2,779</b>	<b>3,124</b>	<b>3,220</b>	<b>3,308</b>	<b>3,335</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
China	12.6	16.9	19.8	17.5	17.4	16.6
Japan	10.6	11.0	10.9	10.8	10.9	10.9
Other East Asia	2.3	3.9	5.3	5.7	6.0	6.2
Southeast Asia	2.0	3.0	4.1	4.4	4.5	4.7
Oceania	2.5	2.7	2.7	2.8	2.7	2.6
Canada	6.6	5.9	5.7	5.7	5.7	5.7
United States	60.1	53.1	47.9	49.3	49.0	49.5
Latin America	3.3	3.7	3.7	3.9	3.7	3.8

### Total Final Energy Consumption by Sector APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	1,086	1,227	1,310	1,353	1,360	1,339
Transport	654	796	900	947	991	1,005
Residential / Commercial	585	688	769	758	786	818
Others	61	68	146	162	171	173
<b>Total</b>	<b>2,386</b>	<b>2,779</b>	<b>3,124</b>	<b>3,220</b>	<b>3,308</b>	<b>3,335</b>

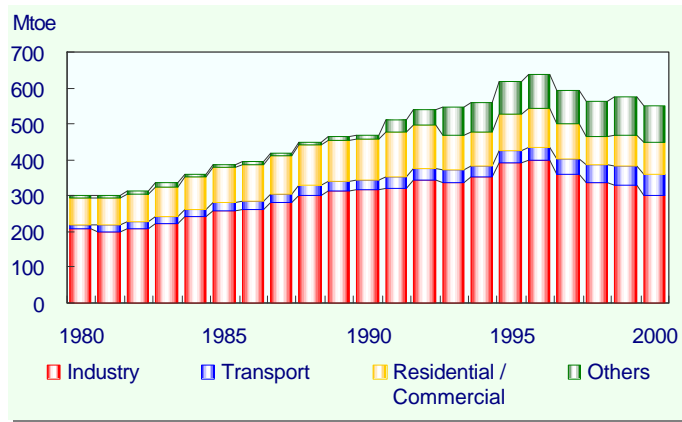
	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	45.5	44.2	41.9	42.0	41.1	40.1
Transport	27.4	28.7	28.8	29.4	30.0	30.1
Residential / Commercial	24.5	24.8	24.6	23.5	23.8	24.5
Others	2.6	2.4	4.7	5.0	5.2	5.2

Final Energy Consumption

=6x48+231+0

=66x48+231+162

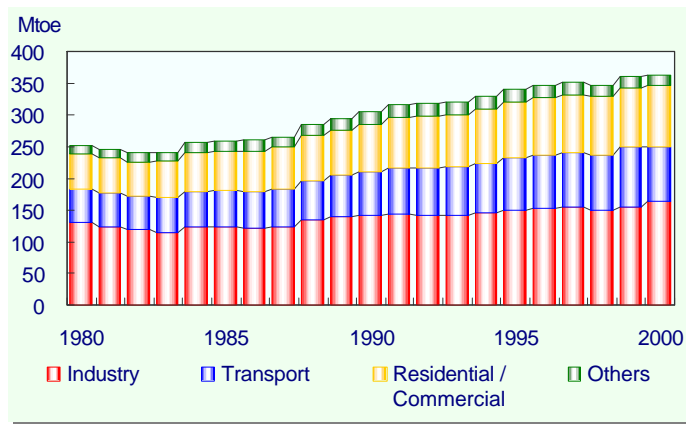
### Total Final Energy Consumption by Sector China



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	206	317	391	338	327	302
Transport	14.3	27.3	34.6	47.9	55.1	59.2
Residential / Commercial	71.9	112.1	102.0	79.5	87.9	88.3
Others	9.6	13.1	90.3	98.1	106.0	103.8
<b>Total</b>	<b>301</b>	<b>469</b>	<b>618</b>	<b>563</b>	<b>576</b>	<b>553</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	68.2	67.5	63.3	60.0	56.7	54.6
Transport	4.7	5.8	5.6	8.5	9.6	10.7
Residential / Commercial	23.8	23.9	16.5	14.1	15.3	16.0
Others	3.2	2.8	14.6	17.4	18.4	18.8

### Total Final Energy Consumption by Sector Japan



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	131	141	150	150	156	163
Transport	52.3	70.1	81.3	86.5	94.0	87.9
Residential / Commercial	54.2	74.7	89.2	92.5	93.2	95.8
Others	14.8	19.6	19.0	18.3	17.1	16.9
<b>Total</b>	<b>253</b>	<b>305</b>	<b>340</b>	<b>347</b>	<b>360</b>	<b>363</b>

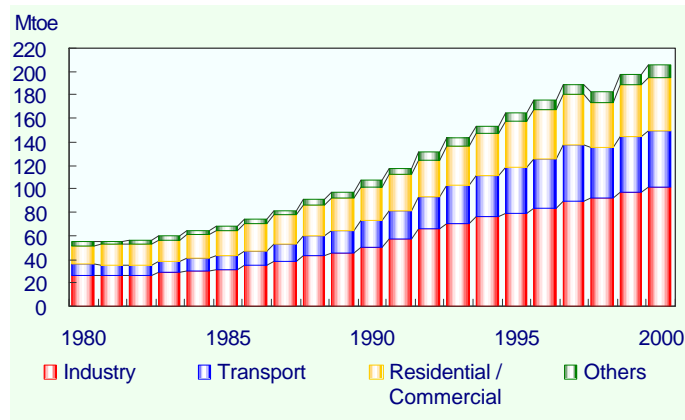
	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	52.0	46.1	44.2	43.2	43.2	44.8
Transport	20.7	23.0	23.9	24.9	26.1	24.2
Residential / Commercial	21.5	24.5	26.2	26.6	25.9	26.4
Others	5.8	6.4	5.6	5.3	4.8	4.7

Final Energy Consumption

=6x48+231+0

=66x48+231+162

### Total Final Energy Consumption by Sector Other East Asia

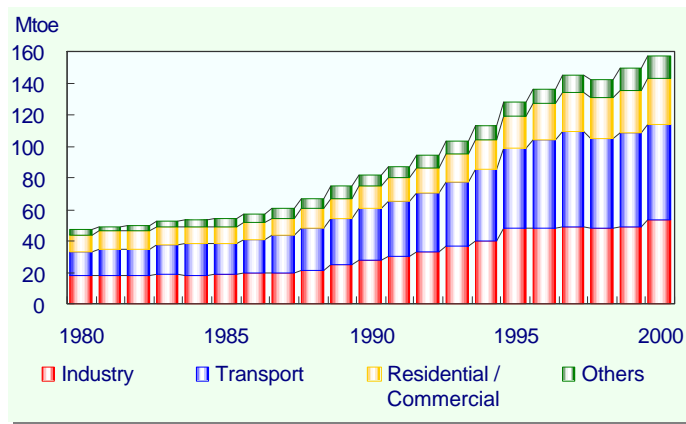


	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	26.9	50.4	79.4	92.0	97.4	101.8
Transport	8.7	22.0	39.0	43.3	46.9	48.0
Residential / Commercial	16.4	29.7	39.1	38.6	44.2	45.3
Others	3.6	5.2	7.1	9.2	9.3	11.0
<b>Total</b>	<b>55.6</b>	<b>107.3</b>	<b>164.6</b>	<b>183.1</b>	<b>197.8</b>	<b>206.1</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	48.4	47.0	48.2	50.3	49.2	49.4
Transport	15.6	20.5	23.7	23.6	23.7	23.3
Residential / Commercial	29.4	27.7	23.8	21.1	22.3	22.0
Others	6.6	4.9	4.3	5.0	4.7	5.4



### Total Final Energy Consumption by Sector Southeast Asia



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	17.4	27.4	47.6	47.7	48.9	52.9
Transport	15.8	32.9	50.7	57.5	59.3	61.0
Residential / Commercial	10.4	14.4	20.7	25.5	26.8	29.0
Others	3.4	7.5	8.9	11.3	14.8	14.8
<b>Total</b>	<b>47.0</b>	<b>82.0</b>	<b>127.9</b>	<b>142.0</b>	<b>149.8</b>	<b>157.8</b>

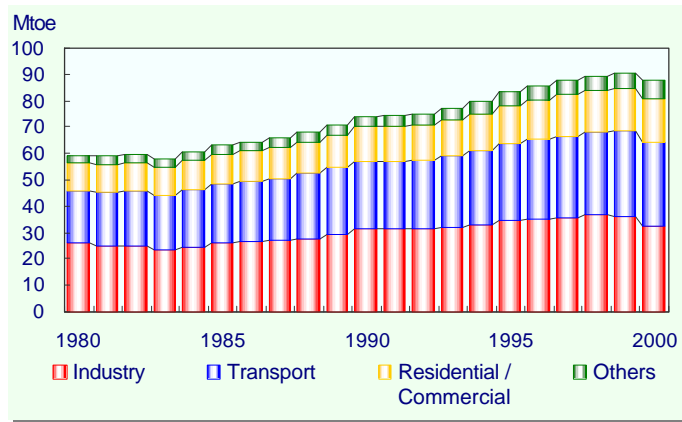
	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	36.9	33.4	37.2	33.6	32.6	33.5
Transport	33.6	40.1	39.7	40.5	39.6	38.7
Residential / Commercial	22.2	17.5	16.2	18.0	17.9	18.4
Others	7.3	9.1	6.9	8.0	9.9	9.4

Final Energy Consumption

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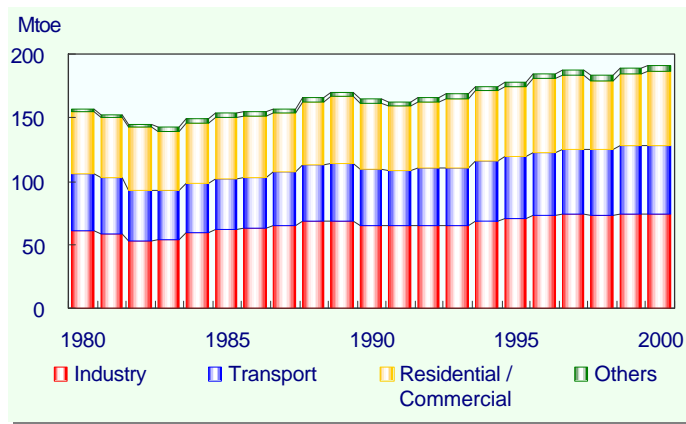
### Total Final Energy Consumption by Sector Oceania



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	25.9	31.2	34.5	36.7	36.4	32.6
Transport	20.0	25.7	29.2	31.5	32.1	31.8
Residential / Commercial	10.5	13.1	14.7	16.0	16.2	16.4
Others	2.9	4.0	5.1	5.5	5.7	6.9
<b>Total</b>	<b>59.3</b>	<b>74.0</b>	<b>83.5</b>	<b>89.6</b>	<b>90.3</b>	<b>87.7</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	43.6	42.1	41.3	41.0	40.3	37.1
Transport	33.8	34.8	35.0	35.1	35.5	36.3
Residential / Commercial	17.7	17.7	17.6	17.8	17.9	18.7
Others	4.9	5.4	6.1	6.1	6.3	7.9

### Total Final Energy Consumption by Sector Canada



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	61.1	65.6	70.4	72.5	74.0	74.1
Transport	45.0	44.2	48.7	52.8	54.5	53.8
Residential / Commercial	48.2	51.3	55.3	53.7	55.7	59.2
Others	2.5	3.5	4.1	4.3	4.4	4.5
<b>Total</b>	<b>156.7</b>	<b>164.6</b>	<b>178.5</b>	<b>183.4</b>	<b>188.6</b>	<b>191.6</b>

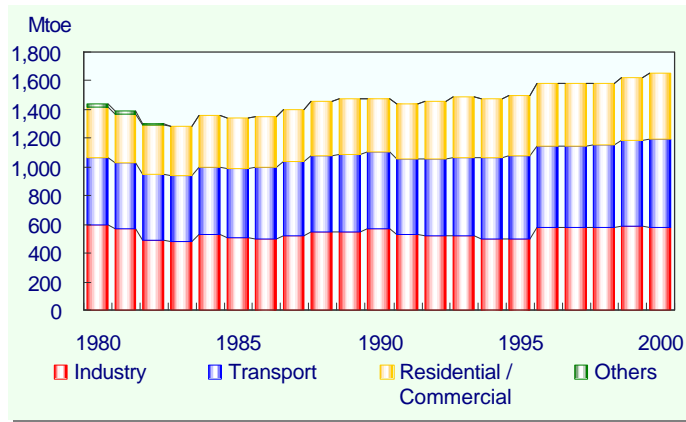
	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	39.0	39.9	39.4	39.6	39.2	38.7
Transport	28.7	26.9	27.3	28.8	28.9	28.1
Residential / Commercial	30.7	31.2	31.0	29.3	29.5	30.9
Others	1.6	2.1	2.3	2.4	2.3	2.3

Final Energy Consumption

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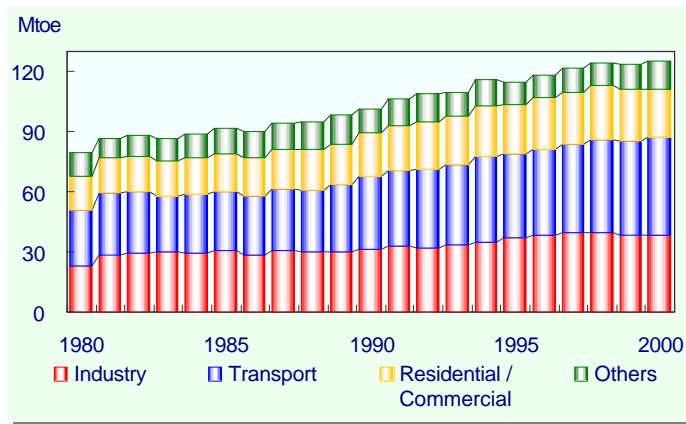
### Total Final Energy Consumption by Sector United States of America



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	594	564	500	576	583	574
Transport	470	538	575	582	602	615
Residential / Commercial	357	371	423	425	436	460
Others	12.9	2.4	0.4	4.0	1.1	1.1
<b>Total</b>	<b>1,434</b>	<b>1,475</b>	<b>1,497</b>	<b>1,587</b>	<b>1,622</b>	<b>1,650</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	41.4	38.2	33.4	36.3	35.9	34.8
Transport	32.8	36.5	38.4	36.7	37.1	37.3
Residential / Commercial	24.9	25.2	28.2	26.8	26.9	27.9
Others	0.9	0.2	0.0	0.3	0.1	0.1

### Total Final Energy Consumption by Sector Latin America



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	23.3	31.4	37.2	40.1	38.2	38.6
Transport	28.0	36.4	41.6	46.0	46.7	48.6
Residential / Commercial	16.6	21.5	24.9	27.2	25.9	24.1
Others	11.6	12.4	10.7	10.9	12.7	14.0
<b>Total</b>	<b>79.5</b>	<b>101.7</b>	<b>114.4</b>	<b>124.2</b>	<b>123.5</b>	<b>125.3</b>

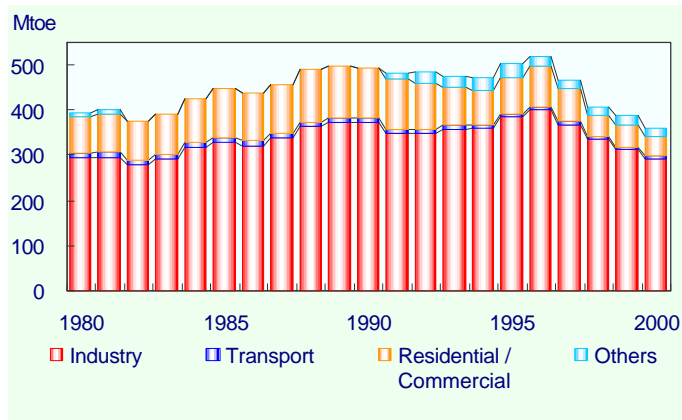
	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	29.3	30.9	32.5	32.3	30.9	30.8
Transport	35.2	35.8	36.4	37.1	37.8	38.8
Residential / Commercial	20.9	21.1	21.8	21.9	21.0	19.2
Others	14.6	12.2	9.4	8.8	10.3	11.2

Final Energy Consumption

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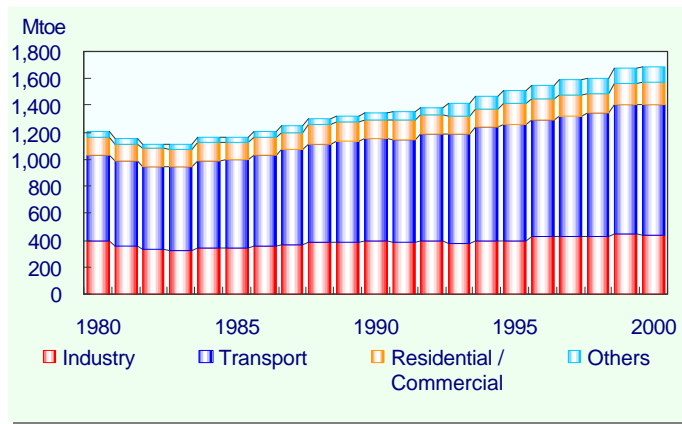
### Coal++ Demand by Sector APEC 19



	Mtoe					
	1980	1990	1995	1998	1999	2000
Industry	296	372	385	335	312	293
Transport	9.6	10.6	6.8	6.3	5.7	4.8
Residential / Commercial	79.2	110.5	82.0	48.5	49.8	44.9
Others	9.6	0.9	29.3	17.6	20.1	18.6
<b>Total</b>	<b>394</b>	<b>494</b>	<b>503</b>	<b>407</b>	<b>388</b>	<b>361</b>

	Share (%)					
	1980	1990	1995	1998	1999	2000
Industry	75.0	75.3	76.5	82.2	80.5	81.1
Transport	2.4	2.1	1.4	1.5	1.5	1.3
Residential / Commercial	20.1	22.4	16.3	11.9	12.8	12.4
Others	2.4	0.2	5.8	4.3	5.2	5.1

### Oil Demand by Sector APEC 19



	1980	1990	1995	1998	1999	Mtoe 2000
Industry	400	392	396	426	449	434
Transport	626	764	867	915	953	971
Residential / Commercial	144	133	147	143	157	163
Others	41	53	96	116	117	117
<b>Total</b>	<b>1,210</b>	<b>1,341</b>	<b>1,506</b>	<b>1,600</b>	<b>1,676</b>	<b>1,685</b>

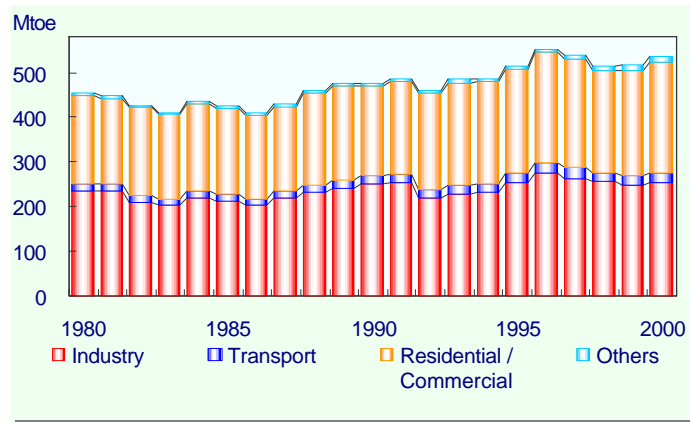
	1980	1990	1995	1998	1999	2000
Industry	33.0	29.3	26.3	26.6	26.8	25.8
Transport	51.7	56.9	57.6	57.2	56.9	57.6
Residential / Commercial	11.9	9.9	9.8	9.0	9.3	9.7
Others	3.4	3.9	6.4	7.2	7.0	7.0

Final Energy Consumption

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### Natural Gas Demand by Sector APEC 19

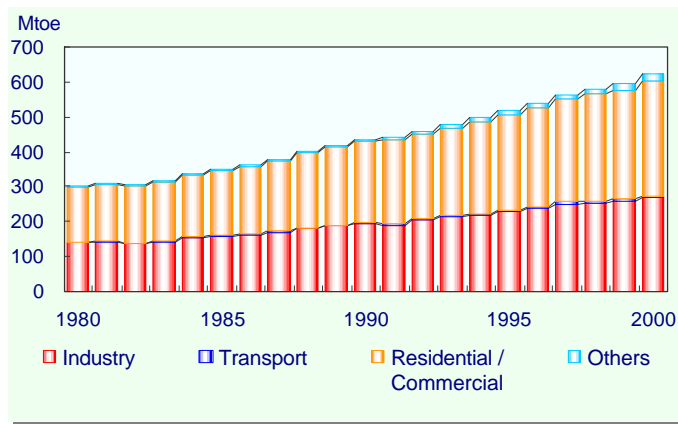


	1980	1990	1995	1998	1999	Mtoe 2000
Industry	235	252	255	256	246	255
Transport	16.4	18.4	21.6	20.6	23.0	20.3
Residential / Commercial	197	201	231	227	234	248
Others	6.4	6.9	7.6	8.7	12.9	12.5
<b>Total</b>	<b>455</b>	<b>478</b>	<b>516</b>	<b>513</b>	<b>516</b>	<b>536</b>

	1980	1990	1995	1998	1999	Share (%) 2000
Industry	51.7	52.7	49.5	50.0	47.7	47.6
Transport	3.6	3.9	4.2	4.0	4.4	3.8
Residential / Commercial	43.3	42.0	44.8	44.3	45.3	46.3
Others	1.4	1.4	1.5	1.7	2.5	2.3



### Electricity Demand by Sector APEC 19



	1980	1990	1995	1998	1999	Mtoe 2000
Industry	140	194	229	253	258	268
Transport	2.2	3.6	4.6	5.5	5.5	5.8
Residential / Commercial	154	231	275	308	313	331
Others	3.9	6.4	11.8	15.2	18.3	19.3
<b>Total</b>	<b>300</b>	<b>435</b>	<b>520</b>	<b>581</b>	<b>595</b>	<b>624</b>

	1980	1990	1995	1998	1999	Share (%) 2000
Industry	46.8	44.5	44.1	43.5	43.4	42.9
Transport	0.7	0.8	0.9	0.9	0.9	0.9
Residential / Commercial	51.2	53.2	52.8	52.9	52.6	53.0
Others	1.3	1.5	2.3	2.6	3.1	3.1

Final Energy Consumption

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## APEC 21, 2000

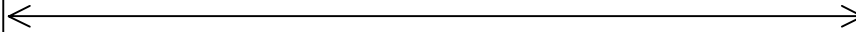
	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,400,286	-	1,261,721	75,958	1,314,007
2 Import	214,368	3,373	1,118,777	337,047	194,135
3 Export	-257,811	-12,222	-412,629	-204,876	-309,211
4 International Marine Bunkers	-	-	-	-70,792	-
5 Stock Change	39,305	1,872	-5,737	-10,756	15,660
6 Total Primary Energy Supply	1,396,147	-6,976	1,962,132	126,581	1,214,592
7 Public Electricity	-932,069	-5,178	-9,316	-93,043	-317,451
8 Autoproducers of Electricity	-76,776	-3,289	-	-22,270	-79,735
9 Gas Processing	-6,948	-14,005	395	-2,898	-43,159
10 Petroleum Refineries	-	-	-1,871,874	1,875,673	-15,976
11 Coal Transformation	-187,960	164,860	-	-843	-
12 Loss & Own Use	-23,686	-4,498	-15,500	-71,746	-53,104
13 Discrepancy	109,974	1,698	-44,412	-38,976	-3,231
14 Total Final Energy Consumption	278,682	132,612	21,424	1,772,478	701,937
15 Industry Sector	195,797	99,063	8,637	426,175	234,591
16 Transport Sector	4,695	68	186	975,464	20,323
17 Other Sector	48,931	7,506	15	220,348	223,736
17.1 Agriculture	6,820	875	-	38,114	616
17.2 Residential & Commercial	39,037	6,426	2	163,626	223,066
17.3 Other	3,074	205	13	18,609	54
18 Non-energy	3,959	3,775	1,644	62,772	30,789

## Australia, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	168,199	-	31,744	-	28,293
2 Import	-	-	19,930	3,942	-
3 Export	-120,129	-13	-16,718	-3,229	-8,805
4 International Marine Bunkers	-	-	-	-356	-
5 Stock Change	-	-	-125	295	-
6 Total Primary Energy Supply	48,071	-13	34,831	651	19,488
7 Public Electricity	-42,348	-	-	-444	-4,518
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-1,907	-1,146	-	-	-366
10 Petroleum Refineries	-	-	-34,831	38,063	-189
11 Coal Transformation	-3,448	2,912	-	-	-
12 Loss & Own Use	-314	-298	-	-2,455	-
13 Discrepancy	2,496	-160	-	-589	-189
14 Total Final Energy Consumption	2,549	1,296	-	35,227	14,226
15 Industry Sector	2,438	1,296	-	5,207	9,945
16 Transport Sector	88	-	-	26,196	274
17 Other Sector	22	-	-	1,816	3,658
17.1 Agriculture	-	-	-	1,298	0
17.2 Residential & Commercial	22	-	-	518	3,658
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	2,008	348

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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	109,736	377,703	38,586	333,606	-	-	4,911,602
-	-	-	-	-	7,100	-	1,874,800
-	-	-	-	-	-7,936	-	-1,204,685
-	-	-	-	-	-	-	-70,792
-	-	-	-	-23	-	-	40,322
-	109,736	377,703	38,586	333,583	-837	-	5,551,247
-206	-104,303	-364,911	-22,158	-2,838	692,295	178,097	-981,080
-340	-5,433	-12,792	-14,203	-18,937	89,040	1,342	-143,391
40,765	-	-	-	-54	-14	-	-25,917
-	-	-	-	-	-164	-	-12,342
2,709	-	-	-	-	-19	-	-21,252
-1,323	-	-	-143	-0	-69,820	-13,160	-252,981
3,760	0	-0	5	-1,837	-24,708	2,712	4,985
45,365	-	-	2,087	309,917	685,774	168,992	4,119,268
20,202	-	-	379	166,902	299,388	83,027	1,534,162
24	-	-	-	31,014	11,023	4,584	1,047,380
25,140	-	-	1,655	107,485	364,119	81,381	1,080,316
11	-	-	97	1,190	11,637	5,263	64,624
25,108	-	-	1,558	106,295	346,151	75,495	986,763
20	-	-	-	-	6,331	623	28,929
-	-	-	-	878	-	-	103,816

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,473	-	103	6,238	-	-	236,051
-	-	-	-	-	-	-	23,871
-	-	-	-	-	-	-	-148,895
-	-	-	-	-	-	-	-356
-	-	-	-	-	-	-	170
-	1,473	-	103	6,238	-	-	110,841
-	-1,453	-	-7	-	17,302	-	-31,469
-	-21	-	-	-1,091	168	-	-943
-	-	-	-	-	-1	-	-3,420
-	-	-	-	-	-132	-	2,912
-	-	-	-	-	-18	-	-554
-	-	-	-	-	-3,067	-	-6,133
-	-0	-	0	0	601	-	2,160
-	-	-	95	5,146	14,854	-	73,393
-	-	-	-	3,266	6,623	-	28,776
-	-	-	-	-	201	-	26,758
-	-	-	95	1,880	8,030	-	15,502
-	-	-	-	-	248	-	1,546
-	-	-	95	1,880	7,782	-	13,956
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,356

Energy Balances

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## Energy Balances

## Brunei Darussalam, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	-	-	8,661	-	8,405
2 Import	-	-	-	22	-
3 Export	-	-	-8,497	-1	-6,805
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	53	1	12
6 Total Primary Energy Supply	-	-	217	22	1,612
7 Public Electricity	-	-	-	-5	-740
8 Autoproducers of Electricity	-	-	-	-	-638
9 Gas Processing	-	-	-	12	-
10 Petroleum Refineries	-	-	-572	566	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-9	-396
13 Discrepancy	-	-	355	-185	185
14 Total Final Energy Consumption	-	-	-	401	22
15 Industry Sector	-	-	-	40	-
16 Transport Sector	-	-	-	324	-
17 Other Sector	-	-	-	14	22
17.1 Agriculture	-	-	-	0	-
17.2 Residential & Commercial	-	-	-	14	22
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	18	-

## Canada, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas. LNG
1 Indigenous Production	34,245	-	136,406	-	148,899
2 Import	16,947	407	47,457	8,175	1,329
3 Export	-18,920	-196	-78,680	-14,908	-82,682
4 International Marine Bunkers	-	-	-	-1,079	-
5 Stock Change	824	65	-319	28	7,644
6 Total Primary Energy Supply	33,097	276	104,864	-7,784	75,190
7 Public Electricity	-22,561	-	-	-2,593	-4,889
8 Autoproducers of Electricity	-4	-79	-	-130	-1,437
9 Gas Processing	-	624	-	-	-
10 Petroleum Refineries	-	-	-103,219	98,116	-
11 Coal Transformation	-3,482	2,777	-	-	-
12 Loss & Own Use	-94	-	-	-8,735	-11,376
13 Discrepancy	-5,801	-561	-1,645	-1,517	-1,956
14 Total Final Energy Consumption	1,155	3,036	-	77,356	55,533
15 Industry Sector	1,101	3,036	-	15,094	26,124
16 Transport Sector	-	-	-	48,655	4,758
17 Other Sector	53	-	-	13,389	24,651
17.1 Agriculture	-	-	-	2,836	586
17.2 Residential & Commercial	53	-	-	10,553	24,065
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	219	-

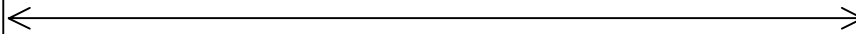
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	17,066
-	-	-	-	-	-	-	22
-	-	-	-	-	-	-	-15,303
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	66
-	-	-	-	-	-	-	1,852
-	-	-	-	-	216	-	-529
-	-	-	-	-	28	-	-611
-	-	-	-	-	-	-	12
-	-	-	-	-	-	-	-6
-	-	-	-	-	-	-	-
-	-	-	-	-	-32	-	-436
-	-	-	-	-	-0	-	354
-	-	-	-	-	213	-	636
-	-	-	-	-	51	-	91
-	-	-	-	-	-	-	324
-	-	-	-	-	161	-	198
-	-	-	-	-	-	-	0
-	-	-	-	-	161	-	198
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	18

Energy Balances

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	30,818	18,969	17	11,162	-	-	380,515
-	-	-	-	-	1,312	-	75,626
-	-	-	-	-	-4,384	-	-199,769
-	-	-	-	-	-	-	-1,079
-	-	-	-	-	-	-	8,244
-	30,818	18,969	17	11,162	-3,072	-	263,536
-	-28,134	-18,969	-10	-	47,946	-	-29,211
-	-2,684	-	-7	-632	4,093	746	-134
-	-	-	-	-	-	-	624
-	-	-	-	-	-	-	-5,103
-	-	-	-	-	-	-	-705
-	-	-	-	-	-5,176	-	-25,381
-	-0	-	-	0	-569	-	-12,049
-	-	-	-	10,530	43,221	746	191,576
-	-	-	-	8,695	19,342	746	74,139
-	-	-	-	-	389	-	53,801
-	-	-	-	1,834	23,477	-	63,404
-	-	-	-	-	820	-	4,242
-	-	-	-	1,834	22,656	-	59,162
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	219

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## Chile, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	243	-	282	-	2,048
2 Import	2,927	48	9,978	1,958	3,674
3 Export	-	-	-	-875	-
4 International Marine Bunkers	-	-	-	-969	-
5 Stock Change	-119	-	-260	278	-295
6 Total Primary Energy Supply	3,052	48	10,001	393	5,427
7 Public Electricity	-2,076	-	-	-145	-1,572
8 Autoproducers of Electricity	-7	-	-	-161	-80
9 Gas Processing	-475	-42	-	-1	-2,315
10 Petroleum Refineries	-	-	-10,217	10,874	-371
11 Coal Transformation	-	467	-	-	-
12 Loss & Own Use	-	-172	-	-138	-
13 Discrepancy	-0	-4	217	-205	-109
14 Total Final Energy Consumption	494	297	-	10,617	979
15 Industry Sector	367	293	-	2,121	642
16 Transport Sector	-	-	-	6,607	8
17 Other Sector	127	4	-	1,435	329
17.1 Agriculture	124	4	-	168	29
17.2 Residential & Commercial	3	-	-	1,267	299
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	454	-

## China, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	474,059	-	154,853	-	22,791
2 Import	1,072	-	66,753	23,712	-
3 Export	-27,006	-9,817	-9,791	-9,718	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	17,755	1,473	-8,673	-3,261	-
6 Total Primary Energy Supply	465,880	-8,344	203,142	10,733	22,791
7 Public Electricity	-289,443	-786	-941	-14,056	-2,468
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-4,566	521	-	-	-
10 Petroleum Refineries	-	-	-192,904	188,210	-
11 Coal Transformation	-90,233	84,815	-	-	-
12 Loss & Own Use	-23,134	-1,328	-5,395	-36,825	-5,720
13 Discrepancy	105,781	1,104	-3,248	32,799	492
14 Total Final Energy Consumption	164,285	75,982	654	180,861	15,094
15 Industry Sector	111,289	65,559	422	41,645	8,582
16 Transport Sector	4,604	68	186	51,714	84
17 Other Sector	44,958	6,580	15	52,162	3,050
17.1 Agriculture	6,655	871	-	14,523	-
17.2 Residential & Commercial	35,228	5,503	2	19,277	2,996
17.3 Other	3,074	205	13	18,362	54
18 Non-energy	3,435	3,775	-	32,106	3,378

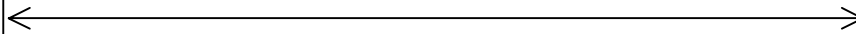
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,646	-	-	6,510	-	-	10,729
-	-	-	-	-	102	-	18,688
-	-	-	-	-	-	-	-875
-	-	-	-	-	-	-	-969
-	-	-	-	-	-	-	-395
-	1,646	-	-	6,510	102	-	27,178
-	-1,597	-	-	-171	3,321	-	-2,241
-	-49	-	-	-304	179	-	-421
149	-	-	-	-55	-13	-	-2,753
-	-	-	-	-	-32	-	253
-	-	-	-	-	-1	-	466
-15	-	-	-	-	-103	-	-428
-9	0	-	-	-2,005	-305	-	-2,420
125	-	-	-	3,975	3,147	-	19,634
87	-	-	-	338	1,928	-	5,776
-	-	-	-	-	19	-	6,634
39	-	-	-	-	1,200	-	3,133
-	-	-	-	-	280	-	606
39	-	-	-	-	919	-	2,527
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	454

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	19,134	4,362	-	771	-	-	675,970
-	-	-	-	-	133	-	91,670
-	-	-	-	-	-850	-	-57,181
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	7,293
-	19,134	4,362	-	771	-717	-	717,752
-	-19,134	-4,362	-	-	116,622	34,883	-179,685
-	-	-	-	-	-	-	-
2,806	-	-	-	-	-	-	-1,239
-	-	-	-	-	-	-	-4,694
2,709	-	-	-	-	-	-	-2,708
-84	-	-	-	-	-26,056	-9,194	-107,735
2,972	-	-	-	-	-8,070	-454	131,375
8,403	-	-	-	771	81,780	25,235	553,066
6,711	-	-	-	-	48,936	18,631	301,774
4	-	-	-	-	2,419	154	59,233
1,689	-	-	-	-	29,109	6,451	144,012
-	-	-	-	-	5,794	13	27,857
1,669	-	-	-	-	17,777	5,814	88,267
20	-	-	-	-	5,538	623	27,889
-	-	-	-	771	-	-	43,464

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## Hong Kong, China, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	-	-	-
2 Import	3,636	22	-	13,245	2,007
3 Export	-2	-22	-	-1,431	-
4 International Marine Bunkers	-	-	-	-3,237	-
5 Stock Change	492	-	-	-374	-
6 Total Primary Energy Supply	4,125	-	-	8,203	2,007
7 Public Electricity	-4,121	-	-	-37	-2,007
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-647	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-0	-	-	20	-
14 Total Final Energy Consumption	4	-	-	7,539	-
15 Industry Sector	-	-	-	1,271	-
16 Transport Sector	-	-	-	6,071	-
17 Other Sector	-	-	-	198	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	198	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

## Indonesia, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	44,007	-	68,981	-	65,798
2 Import	272	-	10,660	10,471	-
3 Export	-33,323	-	-29,789	-8,942	-31,750
4 International Marine Bunkers	-	-	-	-358	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	10,956	-	49,852	1,171	34,048
7 Public Electricity	-8,374	-	-	-4,487	-10,329
8 Autoproducers of Electricity	-1,674	-	-	-14	-139
9 Gas Processing	-	-	-	1,456	-384
10 Petroleum Refineries	-	-	-49,298	48,490	-284
11 Coal Transformation	-21	17	-	-	-
12 Loss & Own Use	-	-	-	-2,702	-16,688
13 Discrepancy	1,149	-	-554	148	319
14 Total Final Energy Consumption	2,036	17	-	44,061	6,543
15 Industry Sector	1,821	-	-	10,948	2,908
16 Transport Sector	-	-	-	21,432	-
17 Other Sector	-	17	-	10,873	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	17	-	10,873	-
17.3 Other	-	-	-	-	-
18 Non-energy	215	-	-	755	3,634

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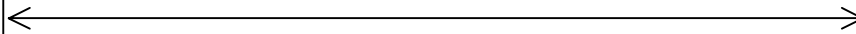
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Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-
-	-	-	-	-	877	-	19,786
-	-	-	-	-	-102	-	-1,557
-	-	-	-	-	-	-	-3,237
-	-	-	-	-	-	-	118
-	-	-	-	-	776	-	15,110
-	-	-	-	-	2,694	-	-3,470
-	-	-	-	-	-	-	-
560	-	-	-	-	-	-	-87
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-348	-	-348
-	-	-	-	-	0	-	20
560	-	-	-	-	3,121	-	11,225
21	-	-	-	-	424	-	1,716
-	-	-	-	-	-	-	6,071
539	-	-	-	-	2,697	-	3,434
-	-	-	-	-	-	-	-
539	-	-	-	-	2,689	-	3,426
-	-	-	-	-	8	-	8
-	-	-	-	-	-	-	-

Unit: ktoe

Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	862	-	4,187	160	-	-	183,995
-	-	-	-	-	-	-	21,403
-	-	-	-	-	-	-	-103,804
-	-	-	-	-	-	-	-358
-	-	-	-	-	-	-	-
-	862	-	4,187	160	-	-	101,236
-	-783	-	-2,278	-160	9,775	-	-16,636
-	-78	-	-1,910	-	786	-	-3,030
1,547	-	-	-	-	-	-	2,618
-	-	-	-	-	-	-	-1,092
-	-	-	-	-	-	-	-4
-0	-	-	-	-	-1,195	-	-20,585
0	0	-	-	-	2,512	-	3,574
1,547	-	-	-	-	11,878	-	66,082
1,499	-	-	-	-	7,995	-	25,170
20	-	-	-	-	-	-	21,452
28	-	-	-	-	3,883	-	14,802
-	-	-	-	-	-	-	-
28	-	-	-	-	3,538	-	14,457
-	-	-	-	-	345	-	345
-	-	-	-	-	-	-	4,605

Energy Balances

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## Energy Balances

## Japan, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,804	-	650	-	2,163
2 Import	94,141	-	215,087	52,813	62,569
3 Export	-	-1,490	-	-16,263	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-159	-	728	-61	-0
6 Total Primary Energy Supply	95,786	-1,490	216,466	36,490	64,732
7 Public Electricity	-32,629	-4,392	-7,559	-12,160	-64,754
8 Autoproducers of Electricity	-5,504	-2,832	-	-12,321	-
9 Gas Processing	-	-1,012	-	-2,866	-1,702
10 Petroleum Refineries	-	-	-208,863	216,286	-
11 Coal Transformation	-42,258	34,207	-	-843	-
12 Loss & Own Use	-84	-2,670	-11	-12,537	-399
13 Discrepancy	2,237	1,358	-32	846	2,549
14 Total Final Energy Consumption	17,548	23,170	0	212,895	426
15 Industry Sector	17,548	22,265	0	75,172	417
16 Transport Sector	-	-	-	86,006	-
17 Other Sector	-	905	-	44,860	9
17.1 Agriculture	-	-	-	9,608	-
17.2 Residential & Commercial	-	905	-	35,252	9
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	6,844	-

## Republic of Korea, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	1,774	-	-	-	-
2 Import	38,531	-	124,396	24,119	17,056
3 Export	-	-	-	-41,398	-
4 International Marine Bunkers	-	-	-	-6,805	-
5 Stock Change	-15	-	-76	-924	-61
6 Total Primary Energy Supply	40,290	-	124,320	-25,008	16,995
7 Public Electricity	-21,911	-	-	-6,054	-5,255
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-296	-11,148
10 Petroleum Refineries	-	-	-123,890	122,466	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-398
13 Discrepancy	476	-	-431	-2,162	36
14 Total Final Energy Consumption	18,855	-	-	88,947	231
15 Industry Sector	18,173	-	-	39,771	187
16 Transport Sector	-	-	-	29,231	-
17 Other Sector	682	-	-	17,321	44
17.1 Agriculture	-	-	-	3,420	-
17.2 Residential & Commercial	682	-	-	13,901	44
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	2,623	-

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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	7,479	83,328	3,893	2,793	-	-	102,112
-	-	-	-	-	-	-	424,610
-	-	-	-	-	-	-	-17,753
-	-	-	-	-	-	-	508
-	7,479	83,328	3,893	2,793	-	-	509,477
-	-7,053	-83,163	-2,689	-175	79,429	-	-135,146
-340	-426	-165	-189	-228	12,921	596	-8,488
22,593	-	-	-	-	-	-	17,013
-	-	-	-	-	-	-	7,423
-	-	-	-	-	-	-	-8,894
-310	-	-	-	-	-9,098	-	-25,109
-7	-0	-0	13	149	-109	-64	6,940
21,936	-	-	1,029	2,539	83,143	532	363,216
8,237	-	-	-	2,486	36,575	-	162,700
-	-	-	-	-	1,866	-	87,872
13,698	-	-	1,029	53	44,703	532	105,788
-	-	-	97	-	329	-	10,033
13,698	-	-	932	53	44,374	532	95,755
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	6,844

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	482	28,397	-	2,130	-	-	32,783
-	-	-	-	-	-	-	204,101
-	-	-	-	-	-	-	-41,398
-	-	-	-	-	-	-	-6,805
-	-	-	-	-	-	-	-1,076
-	482	28,397	-	2,130	-	-	187,605
-206	-482	-28,397	-	-	22,910	1,165	-38,229
-	-	-	-	-	-	-	-
11,268	-	-	-	-	-	-	-176
-	-	-	-	-	-	-	-1,423
-	-	-	-	-	-	-	-
-243	-	-	-	-	-2,310	-46	-2,996
485	-	-	-	-0	-0	-0	-1,595
11,305	-	-	-	2,130	20,600	1,119	143,185
2,966	-	-	-	1,908	10,918	-	73,922
-	-	-	-	-	175	-	29,406
8,339	-	-	-	222	9,507	1,119	37,234
11	-	-	-	-	456	-	3,888
8,328	-	-	-	222	8,636	1,119	32,931
-	-	-	-	-	415	-	415
-	-	-	-	-	-	-	2,623

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## Malaysia, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	242	-	30,839	-	52,432
2 Import	1,943	-	7,218	6,456	-
3 Export	-19	-	-17,254	-6,291	-17,831
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	142	-	-153	141	-596
6 Total Primary Energy Supply	2,308	-	20,650	306	34,005
7 Public Electricity	-1,495	-	-	-783	-11,580
8 Autoproducers of Electricity	-	-	-	-183	-530
9 Gas Processing	-	-	-	-2,237	-23,855
10 Petroleum Refineries	-	-	-21,714	19,550	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-287	-411
13 Discrepancy	178	-	1,064	3,215	6,233
14 Total Final Energy Consumption	991	-	-	19,581	3,862
15 Industry Sector	991	-	-	5,278	2,327
16 Transport Sector	-	-	-	12,059	7
17 Other Sector	-	-	-	1,502	16
17.1 Agriculture	-	-	-	104	-
17.2 Residential & Commercial	-	-	-	1,398	16
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	737	1,512

## Mexico, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,415	-	161,233	-	44,094
2 Import	1,550	400	-	16,157	2,399
3 Export	-2	-1	-86,728	-5,183	-207
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-810	457	-34	-596	-4,634
6 Total Primary Energy Supply	6,152	856	74,471	10,378	41,651
7 Public Electricity	-4,372	-	-	-23,401	-7,963
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-1,151
10 Petroleum Refineries	-	-	-74,899	79,746	-14,864
11 Coal Transformation	-1,531	1,416	-	-	-
12 Loss & Own Use	-	-28	-766	-5,433	-13,415
13 Discrepancy	-249	0	1,195	-563	7,728
14 Total Final Energy Consumption	-	2,244	-	60,728	11,987
15 Industry Sector	-	2,244	-	6,831	10,462
16 Transport Sector	-	-	-	38,458	-
17 Other Sector	-	-	-	10,702	696
17.1 Agriculture	-	-	-	2,080	-
17.2 Residential & Commercial	-	-	-	8,623	696
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	4,734	410

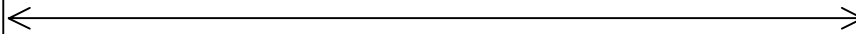
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	599	-	-	-	-	-	84,112
-	-	-	-	-	-	-	15,617
-	-	-	-	-	-	-	-41,395
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-466
-	599	-	-	-	-	-	57,868
-	-599	-	-	-	5,728	-	-8,729
-	-	-	-	-	224	-	-489
-	-	-	-	-	-	-	-26,092
-	-	-	-	-	-	-	-2,163
-	-	-	-	-	-	-	-
-	-	-	-	-	-622	-	-1,320
-	-	-	-	-	-67	-	10,623
-	-	-	-	-	5,263	-	29,697
-	-	-	-	-	2,805	-	11,401
-	-	-	-	-	4	-	12,070
-	-	-	-	-	2,453	-	3,971
-	-	-	-	-	-	-	104
-	-	-	-	-	2,453	-	3,867
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,249

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	2,844	2,142	5,075	8,166	-	-	228,968
-	-	-	-	-	92	-	20,598
-	-	-	-	-	-17	-	-92,137
-	-	-	-	-	-	-	-
-	-	-	-	-23	-	-	-5,640
-	2,844	2,142	5,075	8,143	75	-	151,789
-	-2,844	-2,142	-5,075	-	16,460	-	-29,337
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-1,151
-	-	-	-	-	-	-	-10,017
-	-	-	-	-	-	-	-115
-	-	-	-	-	-3,293	-	-22,935
-	-	-	-	0	116	-	8,226
-	-	-	-	8,143	13,358	-	96,460
-	-	-	-	1,973	7,969	-	29,480
-	-	-	-	-	92	-	38,550
-	-	-	-	6,064	5,296	-	22,758
-	-	-	-	-	679	-	2,759
-	-	-	-	6,064	4,617	-	19,999
-	-	-	-	-	-	-	-
-	-	-	-	107	-	-	5,251

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## New Zealand, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	2,162	-	1,701	240	5,056
2 Import	-	5	4,839	1,233	-
3 Export	-1,100	-1	-1,249	-208	-
4 International Marine Bunkers	-	-	-	-235	-
5 Stock Change	-	-	8	116	1
6 Total Primary Energy Supply	1,062	4	5,299	1,146	5,057
7 Public Electricity	-220	-	-	-	-1,583
8 Autoproducers of Electricity	-23	-	-	-	-509
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-5,266	5,139	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-45	-	-	-253	-130
13 Discrepancy	14	-4	-33	-133	-8
14 Total Final Energy Consumption	787	-	-	5,899	2,827
15 Industry Sector	673	-	-	298	472
16 Transport Sector	2	-	-	4,815	2
17 Other Sector	113	-	-	470	234
17.1 Agriculture	13	-	-	313	-
17.2 Residential & Commercial	99	-	-	157	234
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	316	2,120

## Papua New Guinea, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	1,693	-	119
2 Import	-	-	-	806	-
3 Export	-	-	-1,693	-	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	-	-	-	806	119
7 Public Electricity	-	-	-	-30	-
8 Autoproducers of Electricity	-	-	-	-10	-119
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-	-	-	-0	-
14 Total Final Energy Consumption	-	-	-	766	-
15 Industry Sector	-	-	-	355	-
16 Transport Sector	-	-	-	219	-
17 Other Sector	-	-	-	180	-
17.1 Agriculture	-	-	-	103	-
17.2 Residential & Commercial	-	-	-	77	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	12	-

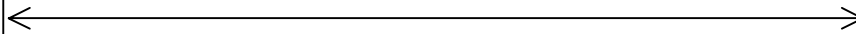
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	2,068	-	2,444	1,217	-	-	14,887
-	-	-	-	-	-	-	6,078
-	-	-	-	-	-	-	-2,559
-	-	-	-	-	-	-	-235
-	-	-	-	-	-	-	126
-	2,068	-	2,444	1,217	-	-	18,296
-	-2,068	-	-1,942	-26	2,964	-	-2,874
-	-	-	-28	-493	291	-	-762
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-127
-	-	-	-	-	-	-	-
-	-	-	-143	-	-229	-	-800
-	-	-	0	11	-109	-	-261
-	-	-	330	710	2,918	-	13,472
-	-	-	268	556	1,143	-	3,411
-	-	-	-	-	37	-	4,855
-	-	-	62	154	1,738	-	2,770
-	-	-	-	-	110	-	436
-	-	-	62	154	1,628	-	2,334
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,436

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	47	-	-	16	-	-	1,875
-	-	-	-	-	-	-	806
-	-	-	-	-	-	-	-1,693
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	47	-	-	16	-	-	988
-	-47	-	-	-	57	-	-19
-	-	-	-	-16	54	-	-92
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-10	-	-10
-	-	-	-	-	0	-	-0
-	-	-	-	-	101	-	867
-	-	-	-	-	49	-	404
-	-	-	-	-	-	-	219
-	-	-	-	-	52	-	231
-	-	-	-	-	-	-	103
-	-	-	-	-	52	-	128
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	12

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## Energy Balances

## Peru, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	12	-	4,829	-	1,547
2 Import	456	132	3,090	1,720	-
3 Export	-	-	-687	-1,407	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	28	3	36	-154	-
6 Total Primary Energy Supply	495	135	7,268	158	1,547
7 Public Electricity	-99	-	-	-398	-202
8 Autoproducers of Electricity	-	-	-	-289	-24
9 Gas Processing	-	-69	-	-	-185
10 Petroleum Refineries	-	-	-7,740	7,763	-
11 Coal Transformation	-31	19	-	-	-
12 Loss & Own Use	-	-0	-	-367	-280
13 Discrepancy	16	-36	472	358	-855
14 Total Final Energy Consumption	381	49	-	7,225	1
15 Industry Sector	381	49	-	2,021	-
16 Transport Sector	-	-	-	3,386	-
17 Other Sector	0	-	-	1,338	1
17.1 Agriculture	0	-	-	65	-
17.2 Residential & Commercial	-	-	-	1,027	1
17.3 Other	-	-	-	247	-
18 Non-energy	-	-	-	122	-

## Philippines, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	649	-	52	-	87
2 Import	3,474	-	15,272	3,127	-
3 Export	-	-	-	-1,824	-
4 International Marine Bunkers	-	-	-	-105	-
5 Stock Change	-4	-	33	74	-
6 Total Primary Energy Supply	4,119	-	15,357	1,271	87
7 Public Electricity	-3,374	-	-	-2,174	-87
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-14,955	14,805	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-15	-	-772	-	-
13 Discrepancy	-80	-	369	-524	-
14 Total Final Energy Consumption	650	-	-	13,378	-
15 Industry Sector	524	-	-	1,772	-
16 Transport Sector	-	-	-	8,288	-
17 Other Sector	-	-	-	3,110	-
17.1 Agriculture	-	-	-	290	-
17.2 Residential & Commercial	-	-	-	2,820	-
17.3 Other	-	-	-	-	-
18 Non-energy	127	-	-	207	-

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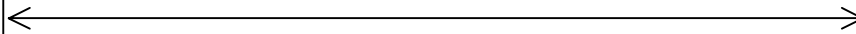
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,391	-	53	-	-	-	7,832
-	-	-	-	-	-	-	5,397
-	-	-	-	-	-	-	-2,094
-	-	-	-	-	-	-	-88
-	1,391	-	53	-	-	-	11,047
-	-1,354	-	-	-	1,576	-	-478
-	-37	-	-	-	137	-	-212
-	-	-	-	1	-	-	-253
-	-	-	-	-	-	-	23
-	-	-	-	-	-	-	-11
-	-	-	-	-0	-223	-	-870
-	-0	-	-	-1	0	-	-46
-	-	-	53	-	1,490	-	9,200
-	-	-	-	-	884	-	3,336
-	-	-	-	-	-	-	3,386
-	-	-	-	-	606	-	1,945
-	-	-	-	-	42	-	107
-	-	-	-	-	538	-	1,566
-	-	-	-	-	25	-	272
-	-	-	-	-	-	-	122

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	671	-	9,998	1,760	-	-	13,218
-	-	-	-	-	-	-	21,873
-	-	-	-	-	-	-	-1,824
-	-	-	-	-	-	-	-105
-	-	-	-	-	-	-	103
-	671	-	9,998	1,760	-	-	33,264
-	-671	-	-9,998	-1,760	4,517	-	-13,548
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-150
-	-	-	-	-	-	-	-
-	-	-	-	-	-751	-	-1,538
-	-	-	-	-	-622	-	-857
-	-	-	-	-	3,144	-	17,171
-	-	-	-	-	1,134	-	3,431
-	-	-	-	-	31	-	8,319
-	-	-	-	-	1,978	-	5,089
-	-	-	-	-	36	-	326
-	-	-	-	-	1,942	-	4,762
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	333

Energy Balances

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## Energy Balances

## Russia, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	115,060	-	323,417	-	471,478
2 Import	11,481	-	6,306	-	10,258
3 Export	-18,837	-	-142,640	-	-155,571
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	31	-	-500	-	-5,654
6 Total Primary Energy Supply	107,734	-	186,583	-	320,511
7 Public Electricity	-58,662	-	-	-	-110,014
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-173,971	126,373	-
11 Coal Transformation	-24,199	22,200	-	-	-
12 Loss & Own Use	-	-	-8,408	-	-
13 Discrepancy	554	-	6,707	-35,567	969
14 Total Final Energy Consumption	25,427	22,200	10,911	90,806	211,466
15 Industry Sector	-	-	-	-	-
16 Transport Sector	-	-	-	-	-
17 Other Sector	-	-	-	-	-
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	-	-	-	-	-
17.3 Other	-	-	-	-	-
18 Non-energy	134	-	-	9,024	19,386

## Singapore, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	-	-	-	-	-
2 Import	0	0	41,585	35,696	-
3 Export	-0	-0	-	-36,837	-
4 International Marine Bunkers	-	-	-	-19,867	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	0	-0	41,585	-21,007	-
7 Public Electricity	-	-	-	-	-942
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	-	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	-0	0	-41,585	21,007	942
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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## Chinese Taipei, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	49	-	32	-	598
2 Import	27,849	61	36,876	9,791	5,169
3 Export	-	-	-	-2,249	-
4 International Marine Bunkers	-	-	-	-4,913	-
5 Stock Change	-460	-7	-720	-5,304	-171
6 Total Primary Energy Supply	27,438	55	36,188	-2,675	5,596
7 Public Electricity	-15,283	-	-	-5,260	-3,176
8 Autoproducers of Electricity	-4,279	-378	-	-884	-217
9 Gas Processing	-	918	-	-	-1,884
10 Petroleum Refineries	-	-	-38,170	37,899	-
11 Coal Transformation	-3,770	3,675	-	-	-
12 Loss & Own Use	-	-4	-	-2,007	-
13 Discrepancy	17	0	1,981	927	-319
14 Total Final Energy Consumption	4,124	4,267	-	28,000	-
15 Industry Sector	4,072	4,267	-	9,610	-
16 Transport Sector	-	-	-	12,433	-
17 Other Sector	0	-	-	2,853	-
17.1 Agriculture	-	-	-	754	-
17.2 Residential & Commercial	0	-	-	2,100	-
17.3 Other	-	-	-	-	-
18 Non-energy	49	-	-	1,959	-

## Thailand, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,196	-	5,159	-	17,685
2 Import	2,602	53	34,062	1,179	1,935
3 Export	-	-	-514	-4,919	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-13	-	694	-621	-
6 Total Primary Energy Supply	7,784	53	39,400	-4,361	19,620
7 Public Electricity	-4,204	-	-	-2,344	-14,106
8 Autoproducers of Electricity	-	-	-	-	-
9 Gas Processing	-	-	395	1,681	-167
10 Petroleum Refineries	-	-	-38,169	32,193	-
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-148	-	-3,891
13 Discrepancy	26	-	166	134	-67
14 Total Final Energy Consumption	3,607	53	1,644	27,303	1,389
15 Industry Sector	3,607	53	-	4,335	1,386
16 Transport Sector	-	-	-	18,822	2
17 Other Sector	-	-	-	3,804	-
17.1 Agriculture	-	-	-	2,167	-
17.2 Residential & Commercial	-	-	-	1,637	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	1,644	342	-

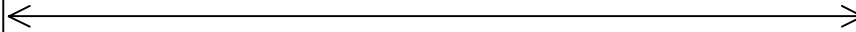
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	763	10,034	-	-	-	-	11,476
-	-	-	-	-	-	-	79,747
-	-	-	-	-	-	-	-2,249
-	-	-	-	-	-	-	-4,913
-	-	-	-	-	-	-	-6,661
-	763	10,034	-	-	-	-	77,400
-	-763	-10,034	-	-	13,298	-	-21,217
-	-	-	-	-	2,599	-	-3,159
1,843	-	-	-	-	-	-	877
-	-	-	-	-	-	-	-271
-	-	-	-	-	-	-	-95
-672	-	-	-	-	-2,127	-	-4,810
319	-	-	-	-	0	-	2,926
1,490	-	-	-	-	13,770	-	51,651
682	-	-	-	-	7,504	-	26,134
-	-	-	-	-	94	-	12,527
808	-	-	-	-	6,173	-	9,834
-	-	-	-	-	195	-	948
808	-	-	-	-	5,978	-	8,886
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2,008

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	518	-	2	-	-	-	28,559
-	-	-	-	-	255	-	40,086
-	-	-	-	-	-17	-	-5,450
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	59
-	518	-	2	-	238	-	63,255
-	-518	-	-2	-	8,254	-	-12,920
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,909
-	-	-	-	-	-	-	-5,976
-	-	-	-	-	-	-	-
-	-	-	-	-	-930	-	-4,969
-	0	-	-	-	0	-	258
-	-	-	-	-	7,562	-	41,557
-	-	-	-	-	3,452	-	12,833
-	-	-	-	-	3	-	18,828
-	-	-	-	-	4,107	-	7,911
-	-	-	-	-	13	-	2,180
-	-	-	-	-	4,094	-	5,731
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,986

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## United States of America, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	541,589	-	315,488	75,718	441,378
2 Import	7,489	2,245	475,268	114,338	87,738
3 Export	-36,569	-680	-2,689	-49,193	-5,561
4 International Marine Bunkers	-	-	-	-32,867	-
5 Stock Change	21,613	-120	3,570	-395	19,416
6 Total Primary Energy Supply	534,122	1,445	791,637	107,602	542,970
7 Public Electricity	-419,692	-	-816	-17,828	-70,396
8 Autoproducers of Electricity	-65,286	-	-	-7,799	-76,041
9 Gas Processing	-	-13,799	-	-	-
10 Petroleum Refineries	-	-	-773,198	828,851	-
11 Coal Transformation	-18,986	12,354	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	3,161	-0	-9,408	-56,984	-19,180
14 Total Final Energy Consumption	33,318	-	8,215	853,841	377,353
15 Industry Sector	30,967	-	8,215	203,768	171,138
16 Transport Sector	-	-	-	595,936	15,189
17 Other Sector	2,351	-	-	53,031	191,026
17.1 Agriculture	-	-	-	-	-
17.2 Residential & Commercial	2,351	-	-	53,031	191,026
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	-	-

## Viet Nam, 2000

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products	Natural Gas, LNG
1 Indigenous Production	5,580	-	15,701	-	1,137
2 Import	-	-	-	8,087	-
3 Export	-1,904	-	-15,701	-	-
4 International Marine Bunkers	-	-	-	-	-
5 Stock Change	-	-	-	-	-
6 Total Primary Energy Supply	3,676	-	-	8,087	1,137
7 Public Electricity	-1,205	-	-	-843	-869
8 Autoproducers of Electricity	-	-	-	-478	-
9 Gas Processing	-	-	-	-	-
10 Petroleum Refineries	-	-	-	284	-268
11 Coal Transformation	-	-	-	-	-
12 Loss & Own Use	-	-	-	-	-
13 Discrepancy	0	-	-	-0	-0
14 Total Final Energy Consumption	2,471	-	-	7,049	-
15 Industry Sector	1,847	-	-	637	-
16 Transport Sector	-	-	-	4,812	-
17 Other Sector	624	-	-	1,290	-
17.1 Agriculture	27	-	-	386	-
17.2 Residential & Commercial	597	-	-	904	-
17.3 Other	-	-	-	-	-
18 Non-energy	-	-	-	293	-

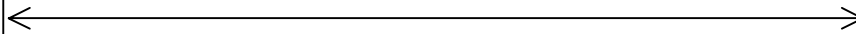
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Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	23,466	196,437	12,788	82,542	-	-	1,689,405
-	-	-	-	-	4,328	-	691,406
-	-	-	-	-	-1,269	-	-95,961
-	-	-	-	-	-	-	-32,867
-	-	-	-	-	-	-	44,085
-	23,466	196,437	12,788	82,542	3,058	-	2,296,067
-	-21,328	-183,810	-130	-545	259,114	-	-455,432
-	-2,138	-12,627	-12,070	-16,172	67,418	-	-124,716
-	-	-	-	-	-	-	-13,799
-	-	-	-	-	-	-	55,653
-	-	-	-	-	-	-	-6,633
-	-	-	-	-	-	-	-
-	-	0	-9	8	-18,238	-	-100,650
-	-	-	579	65,833	311,351	-	1,650,490
-	-	-	111	50,101	109,989	-	574,289
-	-	-	-	3,504	456	-	615,085
-	-	-	468	12,228	200,906	-	460,011
-	-	-	-	-	-	-	-
-	-	-	468	12,228	200,906	-	460,011
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Energy Balances

Unit: ktoe							
Town Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	1,251	-	-	-	-	-	23,669
-	-	-	-	-	-	-	8,087
-	-	-	-	-	-	-	-17,605
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	1,251	-	-	-	-	-	14,152
-	-1,251	-	-	-	2,144	-	-2,025
-	-	-	-	-	143	-	-335
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	-
-	-	-	-	-	-359	-	-359
-	-	-	-	-	0	-	-0
-	-	-	-	-	1,928	-	11,448
-	-	-	-	-	783	-	3,267
-	-	-	-	-	-	-	4,812
-	-	-	-	-	1,145	-	3,059
-	-	-	-	-	37	-	451
-	-	-	-	-	1,108	-	2,608
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	293

=66x48+231+0

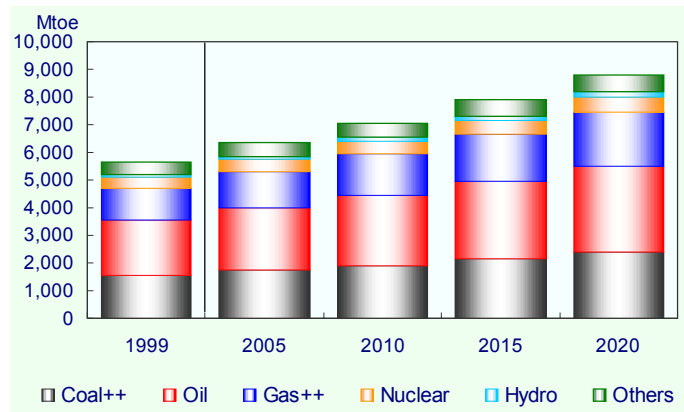
=66x48+231+162

=66x48+0+0

=66x48+0+162

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
<b>Total</b>	<b>5,658.7</b>	<b>6,365.9</b>	<b>7,073.9</b>	<b>7,883.3</b>	<b>8,776.7</b>

	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

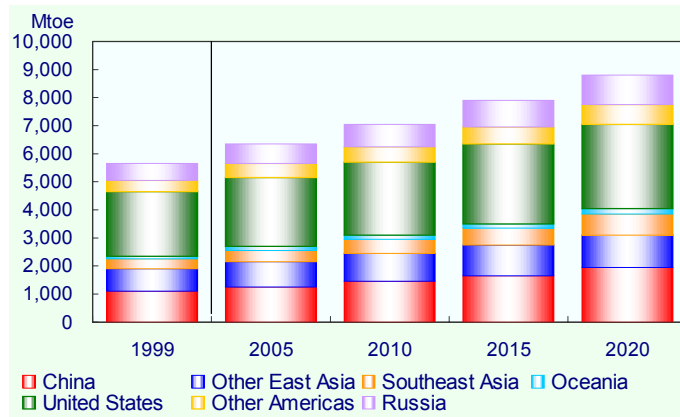
By Asia Pacific Energy Research Centre, September 2002.

=66x48+231+0

=66x48+231+162



### 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
<b>APEC 21</b>	<b>5,658.5</b>	<b>6,365.8</b>	<b>7,073.9</b>	<b>7,884.2</b>	<b>8,776.7</b>

	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	2000	1980	1990	2000	1980	1990
APEC 19	1,787	1,907	2,032	9,759	14,169	19,296	9,883	14,844
APEC 21	1,980	2,122	2,256	-	14,727	19,681	-	16,645
East Asia	1,159.0	1,173.0	1,182.6	3,760.1	5,963.7	7,850.4	2,988.4	5,390.1
China	981.2	981.2	981.2	164.5	396.4	1,040.3	761.8	1,835.8
Hong Kong, China	5.0	5.0	5.0	56.9	107.3	164.6	56.4	106.4
Japan	116.8	123.5	126.9	3,304.4	4,936.0	5,687.6	1,895.6	2,831.5
Republic of Korea	38.1	42.9	47.3	149.1	341.6	617.5	189.4	433.9
Chinese Taipei	17.8	20.4	22.2	85.2	182.5	340.4	85.2	182.5
Southeast Asia	259.4	316.4	374.4	247.1	431.3	698.2	601.3	1,008.3
Brunei Darussalam	0.2	0.3	0.3	5.7	4.8	5.5	5.4	4.6
Indonesia	148.3	178.2	210.4	74.6	138.4	209.1	209.6	389.0
Malaysia	13.8	18.2	23.3	31.6	56.5	111.6	55.1	98.5
Philippines	48.0	61.0	75.6	56.3	66.6	88.2	189.4	223.8
Singapore	2.4	3.0	4.0	26.7	53.9	113.4	21.9	44.3
Thailand	46.7	55.6	60.7	52.2	111.1	170.3	114.3	243.4
Oceania	20.9	24.5	28.1	280.5	372.8	529.2	297.5	394.5
Australia	14.7	17.1	19.2	234.7	318.1	457.3	244.6	331.6
New Zealand	3.1	3.4	3.8	43.1	51.7	67.2	46.5	55.8
Papua New Guinea	3.1	4.0	5.1	2.7	3.0	4.7	6.3	7.1
North America	251.8	277.2	312.3	5,175.2	7,052.1	9,701.7	5,352.2	7,290.3
Canada	24.6	27.8	30.8	403.3	531.6	693.1	482.0	635.5
United States of America	227.2	249.4	281.6	4,771.9	6,520.5	9,008.5	4,870.2	6,654.8
Latin America	96.0	115.9	134.8	296.0	349.3	516.3	649.3	765.6
Chile	11.1	11.1	11.1	29.7	43.0	81.4	50.4	72.9
Mexico	67.6	83.2	98.0	221.8	265.3	374.1	512.3	612.7
Peru	17.3	21.6	25.7	44.5	41.1	60.8	86.6	80.0
Russia	139.0	148.3	145.6	439.7	543.9	357.5	1,395.2	1,725.9
Viet Nam	53.7	66.2	78.5	-	13.6	27.9	-	74.5

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			
2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	
22,623	2,557.8	3,195.7	3,719.6	504.2	538.9	969.9	3,028.9	3,646.3	4,665.1	
23,911	-	-	4,911.6	-	-	670.1	-	-	5,551.2	
9,369.2	477.3	774.9	822.3	339.6	449.9	699.8	818.9	1,195.8	1,507.3	
4,818.5	414.12	670.46	675.97	-18.60	-28.96	34.49	399.64	621.25	717.75	CHN
163.2	0.00	0.00	0.00	5.99	10.79	18.23	4.62	9.09	15.11	HKG
3,262.6	48.71	72.58	102.11	303.24	361.61	406.86	352.60	432.55	509.48	JPN
784.5	9.22	21.69	32.78	29.59	69.49	162.70	38.32	89.36	187.61	KOR
340.4	5.24	10.15	11.48	19.36	37.01	77.50	23.70	43.55	77.40	TWN
1,555.8	132.1	199.0	327.0	-53.6	-51.2	-28.3	71.8	133.7	278.1	
5.3	20.66	15.26	17.07	-17.37	-12.90	-15.28	3.24	2.07	1.85	BRN
587.6	92.08	119.43	184.00	-60.71	-65.85	-82.40	31.07	53.25	101.24	IDN
194.6	16.07	46.53	84.11	-5.01	-25.88	-25.78	10.55	20.47	57.87	MYS
296.6	2.70	6.01	13.22	10.39	11.41	20.05	12.44	17.32	33.26	PHL
93.2	0.00	0.02	0.00	7.13	23.98	40.45	2.44	10.93	20.58	SGP
373.1	0.53	11.75	28.56	12.00	18.01	34.64	12.10	29.67	63.26	THA
560.3	92.1	175.2	252.8	-13.7	-66.8	-122.4	79.4	103.0	130.1	
476.7	86.08	158.19	236.05	-18.31	-65.30	-125.02	69.28	87.94	110.84	AUS
72.6	6.03	12.35	14.89	3.97	2.19	3.52	9.50	14.18	18.30	NZL
11.1	0.03	4.61	1.88	0.63	-3.72	-0.89	0.63	0.86	0.99	PNG
10,022.7	1,689.1	1,838.9	2,069.9	277.6	266.4	471.3	1,942.9	2,069.5	2,559.6	
828.6	207.70	277.42	380.52	-10.95	-68.41	-124.14	194.24	205.97	263.54	CAN
9,194.1	1,481.4	1,561.4	1,689.4	288.6	334.8	595.4	1,748.6	1,863.6	2,296.1	USA
1,120.7	167.1	207.8	247.5	-45.8	-59.4	-50.4	115.9	144.2	190.0	
138.1	7.04	7.76	10.73	4.12	6.96	17.81	10.97	14.26	27.18	CHL
864.2	148.99	191.85	228.97	-46.89	-65.72	-71.54	96.74	122.42	151.79	MEX
118.3	11.10	8.19	7.83	-3.00	-0.60	3.30	8.19	7.54	11.05	PER
1,134.4	-	-	1,168.4	-	-	-290.3	-	-	872.0	RUS
152.8	-	-	23.67	-	-	-9.52	-	-	14.15	VNM

Energy Indicators

Energy Indicators

	Total Final Energy Consumption			Final Consumption of Electricity			Total Primary Energy Supply	
	Mtoe			TWh			toe / Person	
	1980	1990	2000	1980	1990	2000	1980	1990
APEC 19	2,386.4	2,779.2	3,307.8	3,491.5	5,059.6	6,913.1	1.69	1.91
APEC 21	-	-	3,804.2	-	-	7,609.5	-	-
East Asia	609.6	881.7	1,133.2	864.1	1,510.1	2,276.0	0.71	1.02
China	301.39	469.30	575.62	271.6	573.1	950.3	0.41	0.63
Hong Kong, China	2.79	5.13	12.76	10.9	23.8	34.8	0.92	1.80
Japan	252.65	305.09	359.86	511.9	744.8	932.5	3.02	3.50
Republic of Korea	35.69	71.86	136.47	32.7	94.4	214.2	1.01	2.08
Chinese Taipei	17.08	30.27	48.54	36.9	74.0	144.1	1.33	2.14
Southeast Asia	47.0	82.0	149.7	50.5	122.9	320.8	0.28	0.42
Brunei Darussalam	0.24	0.42	0.66	0.3	1.0	2.8	16.81	8.06
Indonesia	21.08	33.96	61.00	7.3	30.5	119.8	0.21	0.30
Malaysia	6.39	13.15	26.74	8.7	19.9	56.0	0.77	1.12
Philippines	9.04	10.28	17.11	15.0	19.3	33.7	0.26	0.28
Singapore	1.00	2.24	3.56	6.1	14.2	27.1	1.01	3.59
Thailand	9.27	22.01	40.67	13.1	38.0	81.5	0.26	0.53
Oceania	59.3	74.0	90.3	101.6	162.4	208.6	3.80	4.21
Australia	51.53	63.24	76.55	81.0	133.1	173.9	4.72	5.15
New Zealand	7.30	10.13	12.96	19.4	27.7	32.8	3.05	4.13
Papua New Guinea	0.44	0.61	0.82	1.2	1.7	2.0	0.20	0.22
North America	1,591.0	1,639.9	1,810.9	2,404.6	3,144.9	3,911.6	7.72	7.47
Canada	156.7	164.6	188.6	307.4	432.9	487.2	7.90	7.41
United States of America	1,434.3	1,475.2	1,622.4	2,097.2	2,712.0	3,424.4	7.70	7.47
Latin America	79.5	101.6	123.5	70.7	119.3	196.1	1.21	1.24
Chile	8.27	11.02	18.70	9.7	15.4	34.7	0.98	1.28
Mexico	65.00	84.42	96.24	52.3	92.1	145.0	1.43	1.47
Peru	6.21	6.21	8.56	8.7	11.8	16.5	0.47	0.35
Russia	-	-	485.93	-	-	676.8	-	-
Viet Nam	-	-	10.47	-	-	19.6	-	-

	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			
2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	
2.30	310.4	257.3	241.8	306.5	245.6	206.2	1,335.3	1,457.3	1,627.7	
2.46	-	-	282.1	-	-	232.2	-	-	1,686.0	
1.27	217.8	200.5	192.0	274.0	221.8	160.9	526.0	751.6	958.2	
0.73	2,429.7	1,567.4	689.9	524.6	338.4	149.0	307.2	478.3	586.6	CHN
3.00	81.1	84.7	91.8	81.8	85.4	92.6	553.0	1,018.9	2,531.9	HKG
4.02	106.7	87.6	89.6	186.0	152.8	156.2	2,163.4	2,469.7	2,836.5	JPN
3.97	257.1	261.6	303.8	202.3	205.9	239.1	936.0	1,676.3	2,886.6	KOR
3.48	278.3	238.6	227.4	-	-	-	959.2	1,487.1	2,185.1	TWN
0.74	290.8	310.0	398.2	119.5	132.6	178.7	181.2	259.3	400.0	
5.48	571.2	430.8	334.9	595.7	449.2	349.3	1,247.4	1,621.5	1,966.2	BRN
0.48	416.5	384.7	484.2	148.2	136.9	172.3	142.1	190.5	289.9	IDN
2.49	333.8	362.3	518.4	191.4	207.8	297.3	463.9	722.2	1,149.1	MYS
0.44	220.8	260.1	377.0	65.7	77.4	112.2	188.2	168.3	226.4	PHL
5.12	91.5	202.7	181.4	111.3	246.7	220.8	415.7	734.1	886.0	SGP
1.04	231.9	267.0	371.4	105.9	121.9	169.5	198.5	396.0	669.7	THA
4.62	283.1	276.2	245.9	267.0	261.0	232.2	2,837.3	3,021.9	3,209.7	
5.78	295.2	276.4	242.4	283.2	265.2	232.5	3,507.6	3,705.6	3,990.7	AUS
4.78	220.3	274.5	272.2	204.1	254.3	252.2	2,345.3	2,947.9	3,382.4	NZL
0.19	234.7	283.6	208.4	100.3	121.2	89.0	142.9	154.0	160.6	PNG
8.20	375.4	293.5	263.8	363.0	283.9	255.4	6,318.1	5,915.2	5,798.7	
8.57	481.7	387.4	380.2	403.0	324.1	318.1	6,372.7	5,923.7	6,132.9	CAN
8.16	366.4	285.8	254.9	359.1	280.0	249.7	6,312.2	5,914.2	5,762.2	USA
1.41	391.6	412.8	368.0	178.5	188.4	169.6	827.6	876.7	916.4	
2.44	369.3	331.6	333.7	217.8	195.5	196.8	742.0	988.8	1,677.7	CHL
1.55	436.2	461.5	405.7	188.9	199.8	175.6	962.0	1,014.3	982.4	MEX
0.43	183.9	183.5	181.8	94.5	94.2	93.4	358.7	287.8	333.7	PER
5.99	-	-	2,438.9	-	-	768.7	-	-	3,338.5	RUS
0.18	-	-	506.8	-	-	92.6	-	-	133.4	VNM

Energy Indicators

## Energy Indicators

	Energy Related CO <sub>2</sub> Emission			CO <sub>2</sub> Emission per Capita		
	kt-C			t-C / Person		
	1980	1990	2000	1980	1990	2000
APEC 19	-	-	3,326,357	-	-	1.637
APEC 21	-	-	3,731,931	-	-	1.654
East Asia	658,961	942,171	1,276,924	0.569	0.803	1.080
China	352,159	554,262	768,533	0.359	0.565	0.783
Hong Kong, China	3,997	9,065	13,486	0.793	1.799	2.676
Japan	251,510	287,216	337,663	2.154	2.325	2.661
Republic of Korea	32,807	60,692	101,417	0.861	1.416	2.145
Chinese Taipei	18,488	30,936	55,825	1.038	1.520	2.513
Southeast Asia	-	-	169,853	-	-	0.454
Brunei Darussalam	644	1,141	1,614	3.337	4.440	4.775
Indonesia	17,311	36,989	66,861	0.117	0.208	0.318
Malaysia	8,063	15,481	26,452	0.586	0.851	1.137
Philippines	8,199	9,730	17,597	0.171	0.159	0.233
Singapore	2,047	9,135	17,115	0.848	2.998	4.260
Thailand	-	-	40,214	-	-	0.662
Oceania	-	80,870	98,888	-	3.303	3.514
Australia	-	74,167	90,780	-	4.346	4.733
New Zealand	-	6,072	7,308	-	1.767	1.908
Papua New Guinea	509	631	800	0.165	0.159	0.156
North America	1,398,132	1,475,965	1,663,485	5.552	5.324	5.327
Canada	110,012	124,320	146,272	4.473	4.473	4.757
United States of America	1,288,120	1,351,645	1,517,213	5.669	5.419	5.389
Latin America	76,517	92,004	117,207	0.797	0.794	0.870
Chile	7,771	9,812	16,101	0.697	0.880	1.444
Mexico	62,997	76,800	93,867	0.932	0.923	0.958
Peru	5,749	5,392	7,239	0.332	0.250	0.282
Russia	-	-	395,303	-	-	2.716
Viet Nam	-	-	10,271	-	-	0.131

CO <sub>2</sub> Emission per Real GDP			CO <sub>2</sub> Emission per Real GDP			CO <sub>2</sub> Emission per Total Primary Energy Supply			
kt-C / Billions of 1995 USD			kt-C / Billions of 1995 PPP			kt-C / Mtoe			
1980	1990	2000	1980	1990	2000	1980	1990	2000	
-	-	172.4	-	-	147.0	-	-	713.0	
-	-	189.6	-	-	156.1	-	-	672.3	
175.3	158.0	162.7	220.5	174.8	136.3	804.7	787.9	847.1	
2,141.0	1,398.4	738.8	462.2	301.9	159.5	881.2	892.2	1,070.7	CHN
70.3	84.5	81.9	70.9	85.2	82.6	865.9	997.1	892.5	HKG
76.1	58.2	59.4	132.7	101.4	103.5	713.3	664.0	662.8	JPN
220.1	177.7	164.2	173.2	139.9	129.3	856.1	679.2	540.6	KOR
217.0	169.5	164.0	217.0	169.5	164.0	779.9	710.3	721.3	TWN
-	-	243.3	-	-	109.2	-	-	610.9	
113.4	237.3	291.9	118.2	247.5	304.4	198.5	550.8	871.6	BRN
232.1	267.2	319.8	82.6	95.1	113.8	557.2	694.6	660.4	IDN
255.0	274.0	237.0	146.3	157.1	135.9	764.0	756.2	457.1	MYS
145.5	146.1	199.4	43.3	43.5	59.3	659.0	561.8	529.0	PHL
76.8	169.4	150.9	93.4	206.2	183.6	839.2	835.9	831.7	SGP
-	-	236.1	-	-	107.8	-	-	635.7	THA
-	216.9	186.9	-	205.0	176.5	-	785.3	759.9	
-	233.1	198.5	-	223.6	190.4	-	843.4	819.0	AUS
-	117.5	108.7	-	108.9	100.7	-	428.2	399.4	NZL
189.3	207.1	168.7	80.9	88.5	72.1	806.7	730.3	809.5	PNG
270.2	209.3	171.5	261.2	202.5	166.0	719.6	713.2	649.9	
272.8	233.9	211.0	228.2	195.6	176.5	566.4	603.6	555.0	CAN
269.9	207.3	168.4	264.5	203.1	165.0	736.6	725.3	660.8	USA
258.5	263.4	227.0	117.8	120.2	104.6	660.2	637.9	616.8	
261.6	228.2	197.7	154.2	134.5	116.6	708.3	688.1	592.4	CHL
284.1	289.5	250.9	123.0	125.3	108.6	651.2	627.3	618.4	MEX
129.2	131.3	119.1	66.4	67.4	61.2	702.4	715.4	655.3	PER
-	-	1,105.7	-	-	348.5	-	-	453.4	RUS
-	-	367.8	-	-	67.2	-	-	725.8	VNM

Energy Indicators

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## Glossary

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### General note

For editing convenience the definition for some items with “++” mark are different with APEC Energy Statistics 2000. In the Energy Balance sector the definition for all item are same as APEC Energy Statistics 2000.

### 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

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 (C<sub>3</sub>H<sub>8</sub>) and butane (C<sub>4</sub>H<sub>10</sub>) or a mixture of these two hydrocarbo

#### 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.

**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.

**Final energy consumption total**

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.