

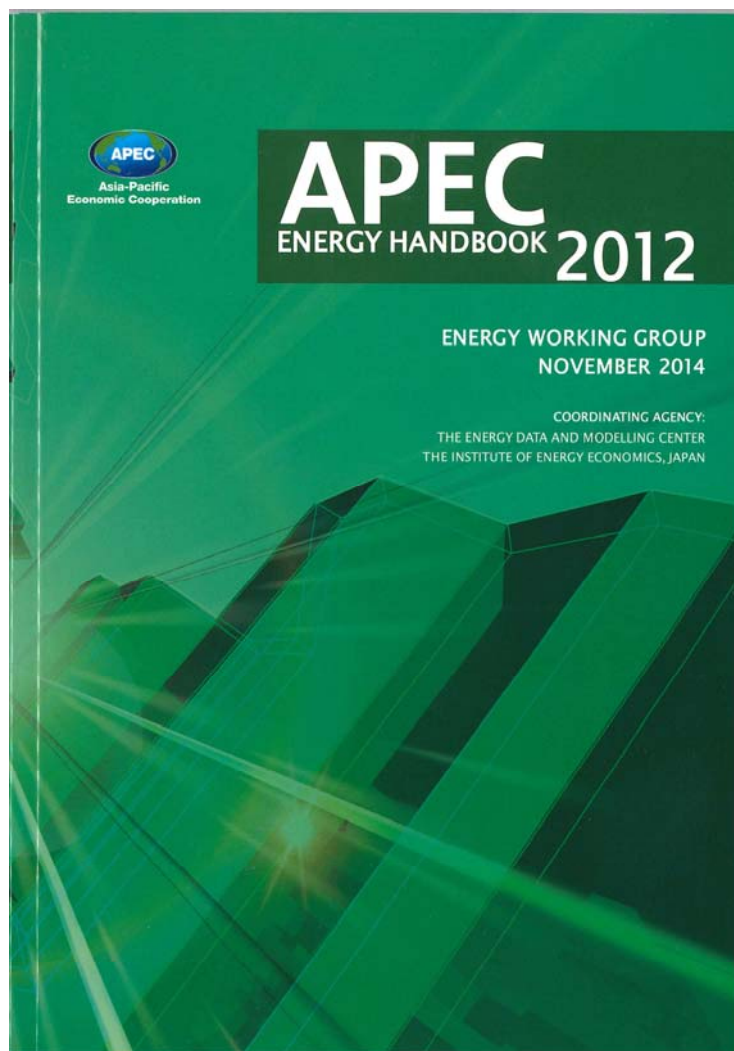


APEC

ENERGY HANDBOOK 2012

ENERGY WORKING GROUP
NOVEMBER 2014

COORDINATING AGENCY:
THE ENERGY DATA AND MODELLING CENTER
THE INSTITUTE OF ENERGY ECONOMICS, JAPAN



A P E C

ENERGY HANDBOOK

2012



ASIA-PACIFIC ECONOMIC COOPERATION

Energy Working Group

November 2014

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

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Preface

The APEC Energy Handbook 2012 is a handy, pocket-sized summary of key energy data and a supplement to APEC Energy Statistics 2012 which has been released in November 2014 by the 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. Energy Outlook
6. Energy Indicators

The Supply part describes Total Primary Energy Supply by energy while Transformation part shows Oil refining and Power Generation. The Consumption part indicates both Final Energy Consumption of commercial energy by Sectors and by Energy. The Energy Balances part includes regional energy balance tables while Outlook part shows projected energy demand by year 2030 which was prepared by Asia Pacific Energy Research Centre as of November 2009. The Energy Indicators part contains several indicators based on Population, GDP and Energy consumption.

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 the twenty-one member economies.

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

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Regional Coverage

	APEC 21	APEC 20	East Asia and Russia	Other East Asia	South- east Asia	Oceania	North America	Latin America
Australia	O	O				O		
Brunei Darussalam	O	O			O			
Canada	O	O					O	
Chile	O	O						O
China	O	O	O					
Hong Kong, China	O	O	O	O				
Indonesia	O	O			O			
Japan	O	O	O					
Republic of Korea	O	O	O	O				
Malaysia	O	O			O			
Mexico	O	O						O
New Zealand	O	O				O		
Papua New Guinea	O	O				O		
Peru	O	O						O
Philippines	O	O			O			
Russia	O	O	O					
Singapore	O	O			O			
Chinese Taipei	O	O	O	O				
Thailand	O	O			O			
United States of America	O	O					O	
Viet Nam	O							

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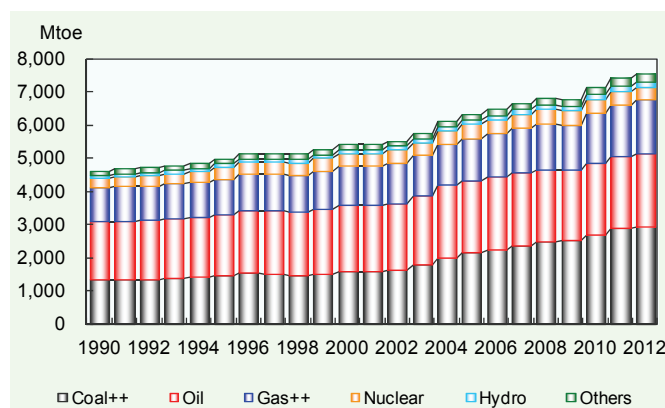
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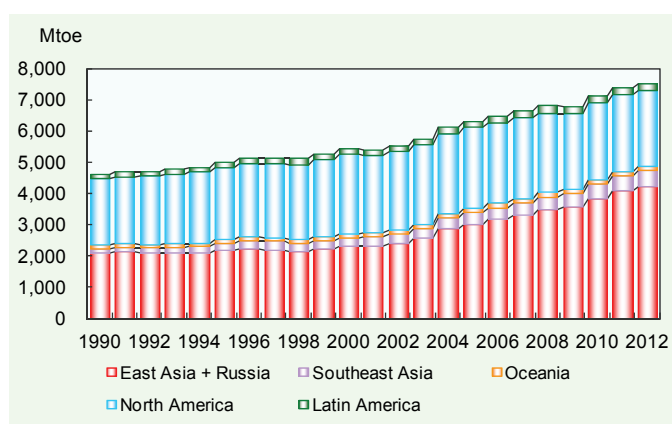
Total Primary Energy Supply by Energy APEC 21



	Mtoe					
	1990	1995	2000	2005	2010	2012
Coal++	1,360.5	1,485.9	1,572.0	2,149.4	2,686.5	2,923.1
Oil	1,750.9	1,818.2	2,001.0	2,192.2	2,173.4	2,232.9
Gas++	997.6	1,083.5	1,194.8	1,270.3	1,488.1	1,614.1
Nuclear	283.4	344.7	389.2	415.9	433.2	361.9
Hydro	92.9	108.1	107.8	125.3	153.7	171.5
Others	146.0	156.2	170.9	179.0	220.6	231.0
Total	4,631.3	4,996.5	5,435.6	6,332.2	7,155.5	7,534.5

	Share (%)					
	1990	1995	2000	2005	2010	2012
Coal++	29.4	29.7	28.9	33.9	37.5	38.8
Oil	37.8	36.4	36.8	34.6	30.4	29.6
Gas++	21.5	21.7	22.0	20.1	20.8	21.4
Nuclear	6.1	6.9	7.2	6.6	6.1	4.8
Hydro	2.0	2.2	2.0	2.0	2.1	2.3
Others	3.2	3.1	3.1	2.8	3.1	3.1

Total Primary Energy Supply by Region APEC 21

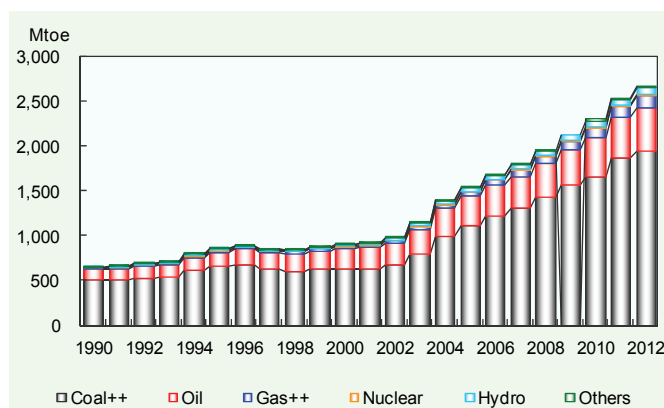


	1990	1995	2000	2005	2010	Mtoe 2012
East Asia + Russia	2,116.7	2,206.8	2,320.1	3,040.9	3,869.4	4,258.9
Southeast Asia	147.4	224.9	282.5	361.0	451.7	487.8
Oceania	99.8	108.2	126.2	132.2	142.9	149.2
North America	2,123.4	2,298.8	2,525.8	2,589.9	2,467.2	2,392.4
Latin America	144.0	157.7	181.1	208.2	224.3	246.1
Total	4,631.3	4,996.5	5,435.6	6,332.2	7,155.5	7,534.5

	1990	1995	2000	2005	2010	Share (%) 2012
East Asia + Russia	45.7	44.2	42.7	48.0	54.1	56.5
Southeast Asia	3.2	4.5	5.2	5.7	6.3	6.5
Oceania	2.2	2.2	2.3	2.1	2.0	2.0
North America	45.8	46.0	46.5	40.9	34.5	31.8
Latin America	3.1	3.2	3.3	3.3	3.1	3.3

Primary Energy Supply

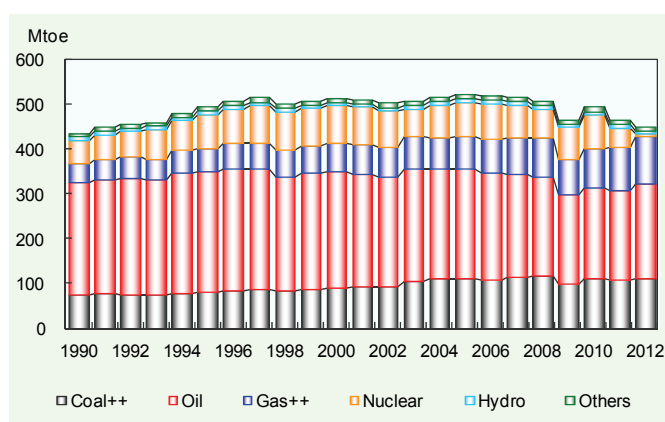
Total Primary Energy Supply by Energy China



	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	512.2	659.2	631.2	1,122.1	1,658.3	1,945.6
Oil	114.4	158.5	224.7	319.1	438.1	474.5
Gas++	14.2	16.7	22.4	44.7	100.1	136.5
Nuclear	-	3.3	4.4	13.8	19.3	25.4
Hydro	10.9	16.4	19.1	34.1	62.1	75.0
Others	2.3	3.8	3.4	5.5	21.6	11.4
Total	654.0	858.0	905.2	1,539.4	2,299.4	2,668.4

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	78.3	76.8	69.7	72.9	72.1	72.9
Oil	17.5	18.5	24.8	20.7	19.1	17.8
Gas++	2.2	1.9	2.5	2.9	4.4	5.1
Nuclear	-	0.4	0.5	0.9	0.8	1.0
Hydro	1.7	1.9	2.1	2.2	2.7	2.8
Others	0.3	0.4	0.4	0.4	0.9	0.4

Total Primary Energy Supply by Energy Japan

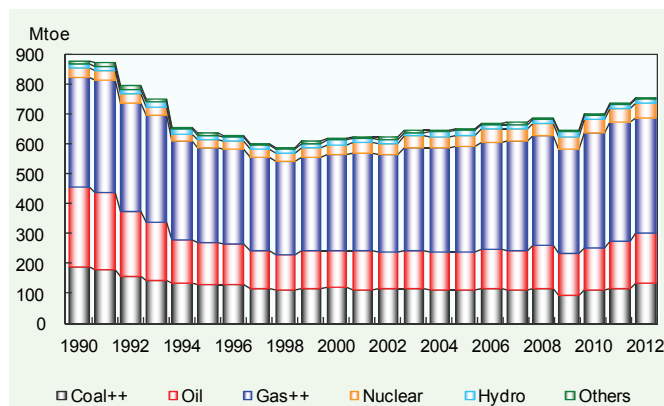


	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	75.7	82.8	91.8	112.9	112.5	111.9
Oil	249.1	267.4	256.5	244.3	201.8	212.0
Gas++	43.5	52.0	64.9	70.9	85.3	105.2
Nuclear	51.0	75.0	83.3	76.4	76.2	4.7
Hydro	7.8	7.1	7.5	7.0	7.8	6.9
Others	7.5	8.8	9.6	9.8	9.6	9.5
Total	434.6	493.2	513.6	521.2	493.2	450.2

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	17.4	16.8	17.9	21.7	22.8	24.9
Oil	57.3	54.2	49.9	46.9	40.9	47.1
Gas++	10.0	10.5	12.6	13.6	17.3	23.4
Nuclear	11.7	15.2	16.2	14.7	15.4	1.0
Hydro	1.8	1.4	1.5	1.4	1.6	1.5
Others	1.7	1.8	1.9	1.9	1.9	2.1

Primary Energy Supply

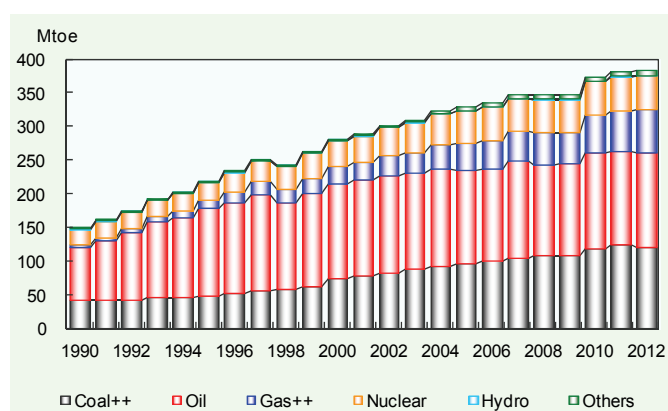
Total Primary Energy Supply by Energy Russia



	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	191.1	129.2	120.0	112.6	114.8	133.4
Oil	263.8	142.7	126.1	129.2	139.1	168.8
Gas++	367.4	316.6	319.0	349.7	383.5	387.1
Nuclear	30.9	26.0	34.1	39.0	44.4	46.3
Hydro	14.3	15.1	14.1	14.9	14.3	14.3
Others	11.5	6.9	5.7	6.2	5.9	6.4
Total	878.9	636.4	619.0	651.5	702.1	756.4

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	21.7	20.3	19.4	17.3	16.4	17.6
Oil	30.0	22.4	20.4	19.8	19.8	22.3
Gas++	41.8	49.8	51.5	53.7	54.6	51.2
Nuclear	3.5	4.1	5.5	6.0	6.3	6.1
Hydro	1.6	2.4	2.3	2.3	2.0	1.9
Others	1.3	1.1	0.9	1.0	0.8	0.8

Total Primary Energy Supply by Energy Other East Asia

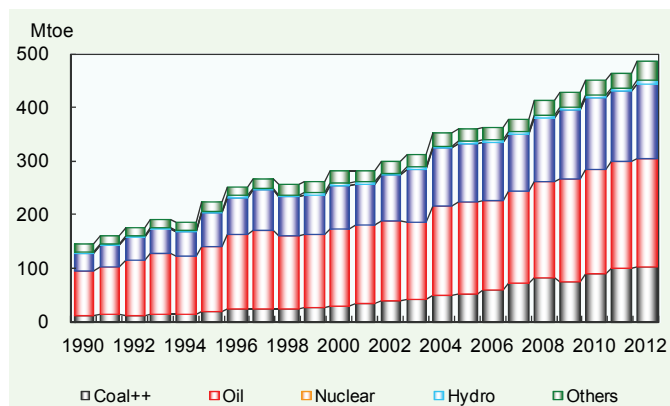


	Mtoe					
	1990	1995	2000	2005	2010	2012
Coal++	42.1	48.4	73.6	95.6	118.8	119.9
Oil	78.4	129.6	142.3	139.3	143.1	142.1
Gas++	4.5	12.0	24.6	39.9	55.9	63.8
Nuclear	22.3	26.7	38.4	48.7	49.6	49.7
Hydro	1.3	1.0	1.1	1.0	0.9	1.1
Others	0.6	1.5	2.2	4.4	6.3	7.4
Total	149.2	219.2	282.2	328.8	374.7	384.0

	Share (%)					
	1990	1995	2000	2005	2010	2012
Coal++	28.2	22.1	26.1	29.1	31.7	31.2
Oil	52.6	59.1	50.4	42.4	38.2	37.0
Gas++	3.0	5.5	8.7	12.1	14.9	16.6
Nuclear	15.0	12.2	13.6	14.8	13.2	12.9
Hydro	0.8	0.5	0.4	0.3	0.3	0.3
Others	0.4	0.7	0.8	1.3	1.7	1.9

Primary Energy Supply

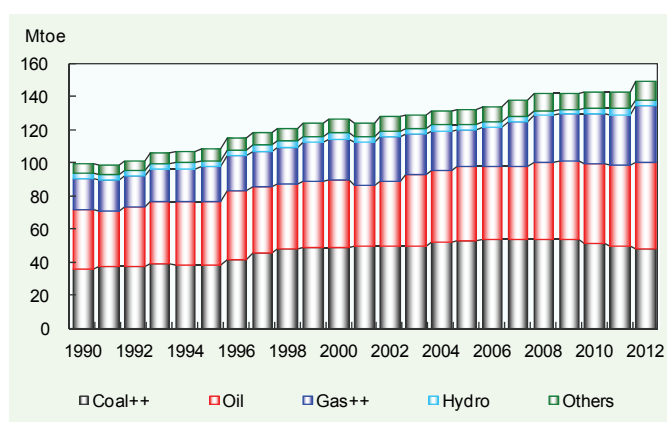
Total Primary Energy Supply by Energy Southeast Asia



	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	12.8	20.2	30.0	53.6	91.0	103.8
Oil	83.9	120.4	144.1	172.4	193.2	201.4
Gas++	31.1	64.0	81.7	107.9	135.2	138.9
Nuclear	-	-	-	-	-	-
Hydro	2.7	3.7	3.9	4.2	5.6	8.1
Others	16.8	16.7	22.8	22.9	26.7	35.7
Total	147.4	224.9	282.5	361.0	451.7	487.8

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	8.7	9.0	10.6	14.8	20.1	21.3
Oil	56.9	53.5	51.0	47.8	42.8	41.3
Gas++	21.1	28.5	28.9	29.9	29.9	28.5
Nuclear	-	-	-	-	-	-
Hydro	1.8	1.6	1.4	1.2	1.2	1.7
Others	11.4	7.4	8.1	6.3	5.9	7.3

Total Primary Energy Supply by Energy Oceania

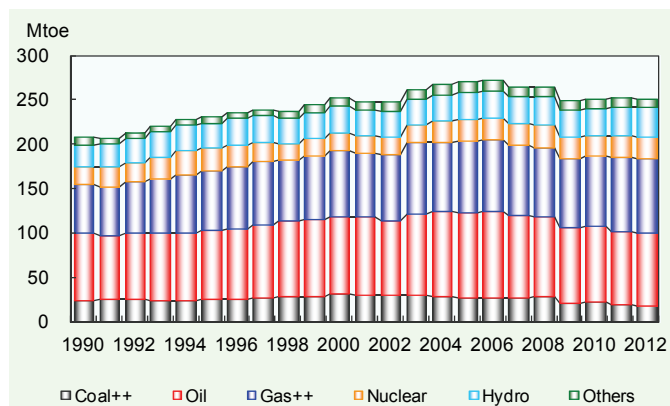


	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	36.1	38.7	49.3	53.2	51.4	48.4
Oil	35.5	38.4	40.8	44.5	48.0	52.3
Gas++	18.7	20.7	24.5	22.3	30.1	33.8
Nuclear	-	-	-	-	-	-
Hydro	3.3	3.8	3.6	3.4	3.4	3.3
Others	6.2	6.7	8.1	8.7	10.1	11.5
Total	99.8	108.2	126.2	132.2	142.9	149.2

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	36.2	35.7	39.0	40.3	35.9	32.4
Oil	35.5	35.5	32.3	33.6	33.6	35.0
Gas++	18.8	19.1	19.4	16.9	21.0	22.6
Nuclear	-	-	-	-	-	-
Hydro	3.3	3.5	2.8	2.6	2.3	2.2
Others	6.2	6.2	6.4	6.6	7.1	7.7

Primary Energy Supply

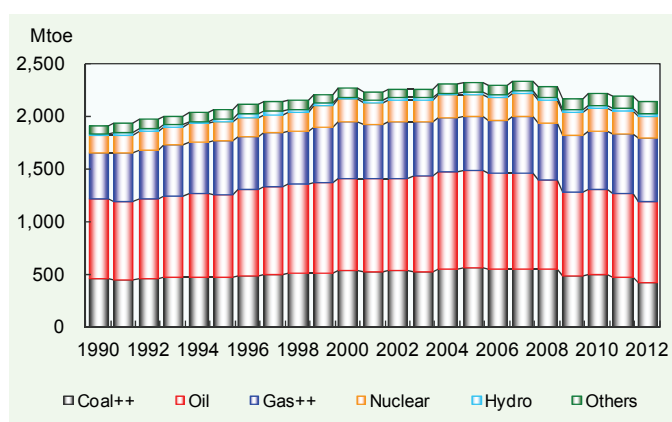
Total Primary Energy Supply by Energy Canada



	Mtoe					
	1990	1995	2000	2005	2010	2012
Coal++	24.3	25.3	31.7	27.2	22.2	18.4
Oil	76.5	77.8	87.8	96.2	86.0	82.5
Gas++	54.7	67.1	74.3	80.7	78.7	83.5
Nuclear	19.0	25.5	19.0	24.0	23.6	24.7
Hydro	25.5	28.9	30.8	31.1	30.2	32.7
Others	8.1	6.7	8.7	11.5	10.5	9.4
Total	208.2	231.3	252.2	270.8	251.3	251.1

	Share (%)					
	1990	1995	2000	2005	2010	2012
Coal++	11.7	10.9	12.6	10.1	8.8	7.3
Oil	36.7	33.6	34.8	35.5	34.2	32.8
Gas++	26.3	29.0	29.4	29.8	31.3	33.3
Nuclear	9.1	11.0	7.5	8.9	9.4	9.8
Hydro	12.3	12.5	12.2	11.5	12.0	13.0
Others	3.9	2.9	3.4	4.2	4.2	3.7

Total Primary Energy Supply by Energy United States of America

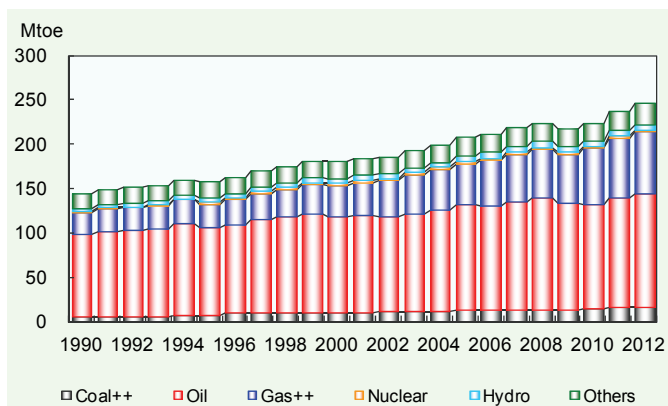


	1990	1995	2000	2005	2010	Mtoe 2012
Coal++	460.2	474.0	533.6	558.4	502.6	425.2
Oil	756.9	785.6	871.2	929.2	805.8	771.3
Gas++	438.4	507.4	547.7	507.2	556.1	595.7
Nuclear	159.4	186.0	207.9	211.3	218.6	208.8
Hydro	23.5	27.0	21.8	23.4	22.6	24.0
Others	76.9	87.4	91.4	89.6	110.2	116.3
Total	1,915.2	2,067.5	2,273.6	2,319.2	2,215.9	2,141.3

	1990	1995	2000	2005	2010	Share (%) 2012
Coal++	24.0	22.9	23.5	24.1	22.7	19.9
Oil	39.5	38.0	38.3	40.1	36.4	36.0
Gas++	22.9	24.5	24.1	21.9	25.1	27.8
Nuclear	8.3	9.0	9.1	9.1	9.9	9.7
Hydro	1.2	1.3	1.0	1.0	1.0	1.1
Others	4.0	4.2	4.0	3.9	5.0	5.4

Primary Energy Supply

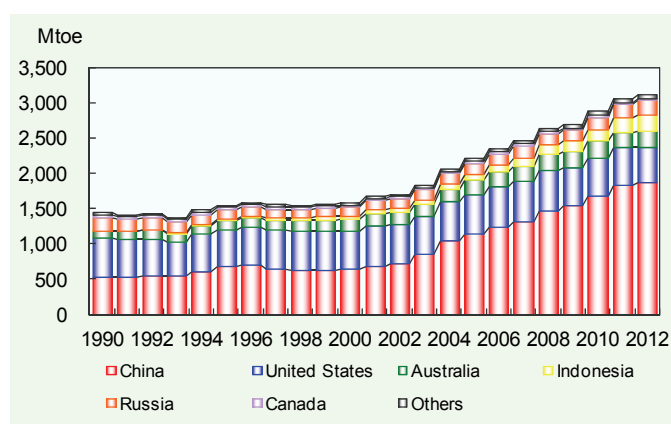
Total Primary Energy Supply by Energy Latin America



	Mtoe					
	1990	1995	2000	2005	2010	2012
Coal++	6.1	8.2	10.8	13.8	14.8	16.5
Oil	92.5	97.8	107.6	118.0	118.3	127.9
Gas++	25.0	26.9	35.7	47.1	63.2	69.6
Nuclear	0.8	2.2	2.1	2.8	1.5	2.3
Hydro	3.7	5.1	5.8	6.2	6.8	6.3
Others	16.0	17.6	19.0	20.4	19.7	23.4
Total	144.0	157.7	181.1	208.2	224.3	246.1

	Share (%)					
	1990	1995	2000	2005	2010	2012
Coal++	4.2	5.2	6.0	6.6	6.6	6.7
Oil	64.2	62.0	59.4	56.7	52.7	52.0
Gas++	17.4	17.1	19.7	22.6	28.2	28.3
Nuclear	0.5	1.4	1.2	1.4	0.7	0.9
Hydro	2.5	3.2	3.2	3.0	3.0	2.6
Others	11.1	11.1	10.5	9.8	8.8	9.5

Indigenous Production of Coal APEC 21

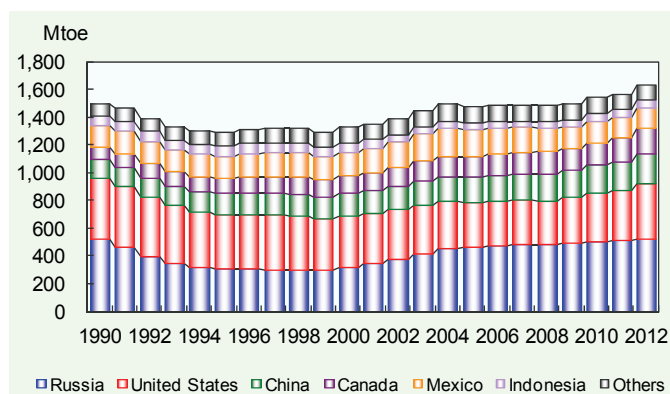


	Mtoe					
	1990	1995	2000	2005	2010	2012
China	540.0	680.4	649.6	1,143.3	1,691.7	1,869.3
United States	542.3	529.8	536.9	565.3	531.8	495.5
Australia	106.1	127.8	164.6	201.6	236.4	239.9
Indonesia	5.8	24.0	44.0	82.8	161.8	226.9
Russia	192.4	130.7	128.5	157.4	180.0	200.7
Canada	37.9	40.8	34.4	32.1	33.8	33.5
Others	27.0	24.4	25.8	35.8	45.9	46.7
Total	1,451.5	1,557.8	1,583.8	2,218.1	2,881.5	3,112.5

	Share (%)					
	1990	1995	2000	2005	2010	2012
China	37.2	43.7	41.0	51.5	58.7	60.1
United States	37.4	34.0	33.9	25.5	18.5	15.9
Australia	7.3	8.2	10.4	9.1	8.2	7.7
Indonesia	0.4	1.5	2.8	3.7	5.6	7.3
Russia	13.3	8.4	8.1	7.1	6.2	6.4
Canada	2.6	2.6	2.2	1.4	1.2	1.1
Others	1.9	1.6	1.6	1.6	1.6	1.5

Coal: Hard Coal, Anthracite and Lignite

Indigenous Production of Crude Oil APEC 21

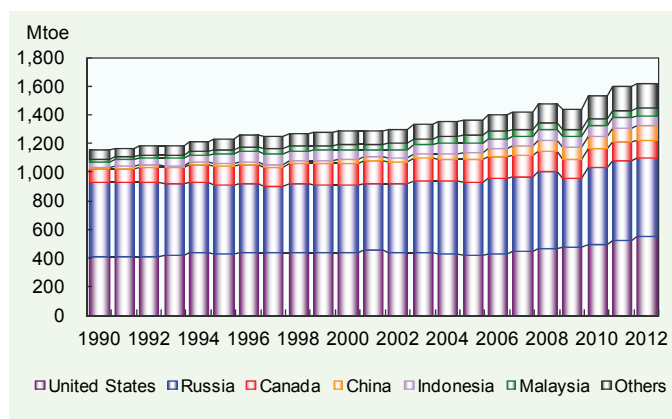


	1990	1995	2000	2005	2010	Mtoe 2012
Russia	526.3	306.6	323.3	468.7	506.5	521.3
United States	432.6	397.9	365.6	322.6	346.8	407.5
China	138.4	150.0	163.0	181.4	203.0	207.5
Canada	94.1	113.5	128.4	147.3	162.7	185.6
Mexico	152.8	155.3	170.9	193.7	155.0	152.2
Indonesia	70.7	72.9	69.0	48.1	58.0	50.3
Others	87.3	98.8	109.4	115.7	115.5	109.7
Total	1,502.2	1,294.9	1,329.7	1,477.4	1,547.6	1,634.0

	1990	1995	2000	2005	2010	Share (%) 2012
Russia	35.0	23.7	24.3	31.7	32.7	31.9
United States	28.8	30.7	27.5	21.8	22.4	24.9
China	9.2	11.6	12.3	12.3	13.1	12.7
Canada	6.3	8.8	9.7	10.0	10.5	11.4
Mexico	10.2	12.0	12.9	13.1	10.0	9.3
Indonesia	4.7	5.6	5.2	3.3	3.7	3.1
Others	5.8	7.6	8.2	7.8	7.5	6.7

Crude Oil includes NGL and condensate

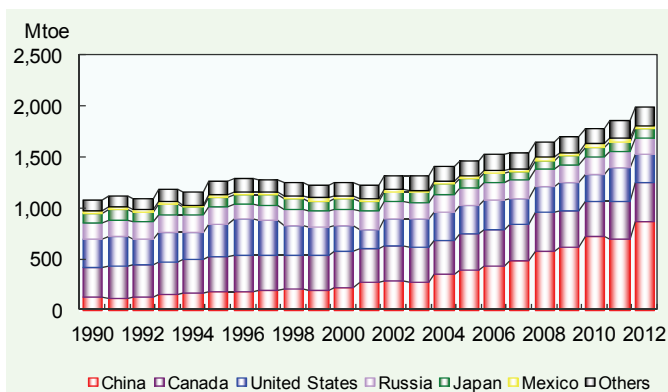
Indigenous Production of Natural Gas APEC 21



	1990	1995	2000	2005	2010	Mtoe 2012
United States	418.2	434.6	446.9	421.6	494.8	558.9
Russia	516.8	480.6	470.7	515.8	540.2	540.8
Canada	88.6	130.3	148.4	154.1	132.4	130.0
China	14.2	16.7	25.3	47.4	88.3	99.8
Indonesia	41.0	68.0	65.8	68.7	76.6	69.4
Malaysia	15.4	24.5	42.3	55.0	46.6	51.2
Others	62.7	76.1	93.6	107.8	155.0	166.9
Total	1,157.0	1,230.7	1,293.1	1,370.5	1,533.9	1,616.9

	1990	1995	2000	2005	2010	Share (%) 2012
United States	36.1	35.3	34.6	30.8	32.3	34.6
Russia	44.7	39.0	36.4	37.6	35.2	33.4
Canada	7.7	10.6	11.5	11.2	8.6	8.0
China	1.2	1.4	2.0	3.5	5.8	6.2
Indonesia	3.5	5.5	5.1	5.0	5.0	4.3
Malaysia	1.3	2.0	3.3	4.0	3.0	3.2
Others	5.4	6.2	7.2	7.9	10.1	10.3

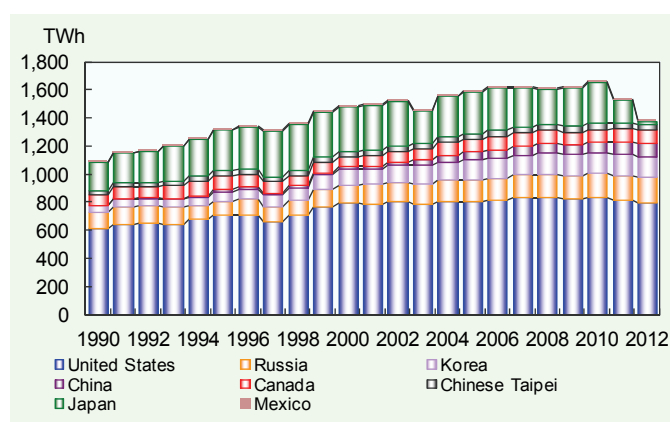
Indigenous Production of Hydro Power APEC 21



	TWh					
	1990	1995	2000	2005	2010	2012
China	126.7	190.6	222.4	397.0	722.2	872.1
Canada	296.7	335.9	358.5	361.9	351.4	380.5
United States	273.2	314.1	253.2	272.4	262.3	278.5
Russia	165.9	175.4	164.1	172.7	166.5	165.9
Japan	95.6	90.0	94.2	87.1	95.3	84.2
Mexico	23.5	27.5	33.1	27.7	37.1	31.9
Others	102.7	130.2	134.7	144.0	156.8	185.8
Total	1,084.3	1,263.8	1,260.2	1,462.8	1,791.5	1,998.8

	Share (%)					
	1990	1995	2000	2005	2010	2012
China	11.7	15.1	17.6	27.1	40.3	43.6
Canada	27.4	26.6	28.4	24.7	19.6	19.0
United States	25.2	24.9	20.1	18.6	14.6	13.9
Russia	15.3	13.9	13.0	11.8	9.3	8.3
Japan	8.8	7.1	7.5	6.0	5.3	4.2
Mexico	2.2	2.2	2.6	1.9	2.1	1.6
Others	9.5	10.3	10.7	9.8	8.8	9.3

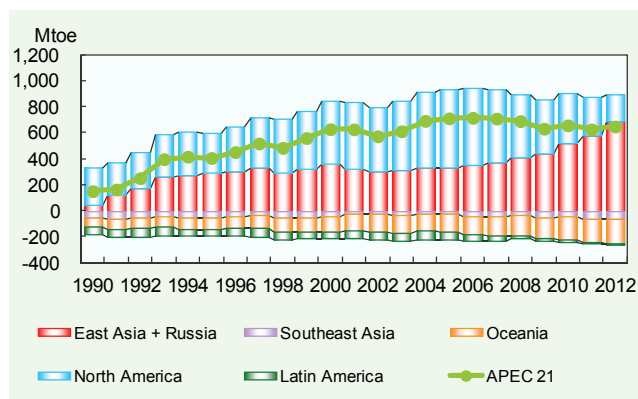
Indigenous Production of Nuclear Power APEC 21



	TWh					
	1990	1995	2000	2005	2010	2012
United States	611.6	713.8	797.7	810.7	838.9	801.1
Russia	118.3	99.5	130.7	149.4	170.4	177.5
Korea	52.9	67.0	109.0	146.8	148.6	150.3
China	-	12.8	16.7	53.1	73.9	97.4
Canada	72.9	97.8	72.8	92.0	90.7	94.9
Chinese Taipei	32.9	35.3	38.5	40.0	41.6	40.5
Japan	195.8	287.9	319.8	293.0	292.4	18.0
Mexico	2.9	8.4	8.2	10.8	5.9	8.8
Total	1,087.2	1,322.7	1,493.4	1,595.9	1,662.3	1,388.5

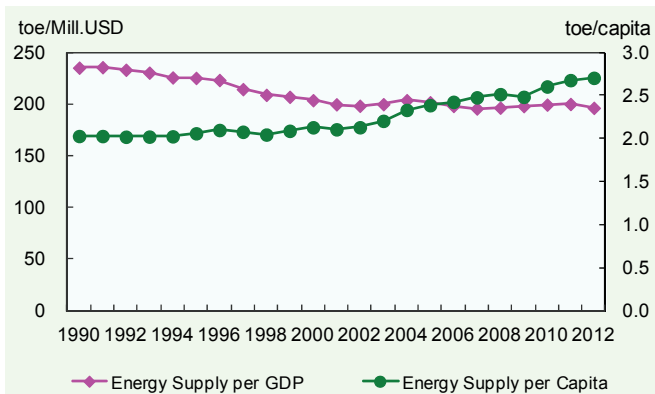
	Share (%)					
	1990	1995	2000	2005	2010	2012
United States	56.3	54.0	53.4	50.8	50.5	57.7
Russia	10.9	7.5	8.8	9.4	10.3	12.8
Korea	4.9	5.1	7.3	9.2	8.9	10.8
China	-	1.0	1.1	3.3	4.4	7.0
Canada	6.7	7.4	4.9	5.8	5.5	6.8
Chinese Taipei	3.0	2.7	2.6	2.5	2.5	2.9
Japan	18.0	21.8	21.4	18.4	17.6	1.3
Mexico	0.3	0.6	0.6	0.7	0.4	0.6

Net Import by Region APEC 21



	1990	1995	2000	2005	2010	2012
Australia	-64.5	-89.2	-127.1	-148.7	-185.6	-186.8
Brunei Darussalam	-13.7	-14.3	-15.2	-17.8	-17.0	-16.5
Canada	-59.3	-119.7	-127.7	-133.7	-149.8	-168.7
Chile	7.0	10.8	17.7	20.5	22.3	25.0
China	-30.5	-8.9	32.4	137.4	333.7	467.6
Hong Kong, China	10.8	14.3	18.2	23.4	31.4	28.1
Indonesia	-65.9	-85.2	-82.4	-73.9	-140.7	-182.2
Japan	371.4	405.7	420.4	433.1	406.6	436.0
Korea	70.1	134.8	165.7	175.6	221.0	228.1
Malaysia	-25.8	-28.2	-27.3	-28.1	-13.9	-8.3
Mexico	-69.9	-68.8	-71.6	-77.2	-40.0	-22.9
New Zealand	2.1	3.1	3.4	4.9	2.9	3.8
Papua New Guinea	-3.7	-4.0	-2.7	-1.0	0.8	0.8
Peru	-0.6	1.8	3.3	2.8	-2.8	-2.4
Philippines	11.9	17.7	20.0	17.0	17.7	19.6
Russia	-412.6	-315.0	-349.6	-539.3	-579.1	-565.0
Singapore	22.9	31.9	40.3	50.8	67.1	73.1
Chinese Taipei	39.4	55.7	76.4	96.4	101.8	96.4
Thailand	18.2	32.6	34.6	48.2	53.5	54.1
United States	341.9	433.4	606.4	736.1	533.5	374.9
Viet Nam	-0.2	-4.7	-9.8	-17.7	-7.8	-8.1
Total	149.2	403.9	625.5	708.8	655.3	646.6

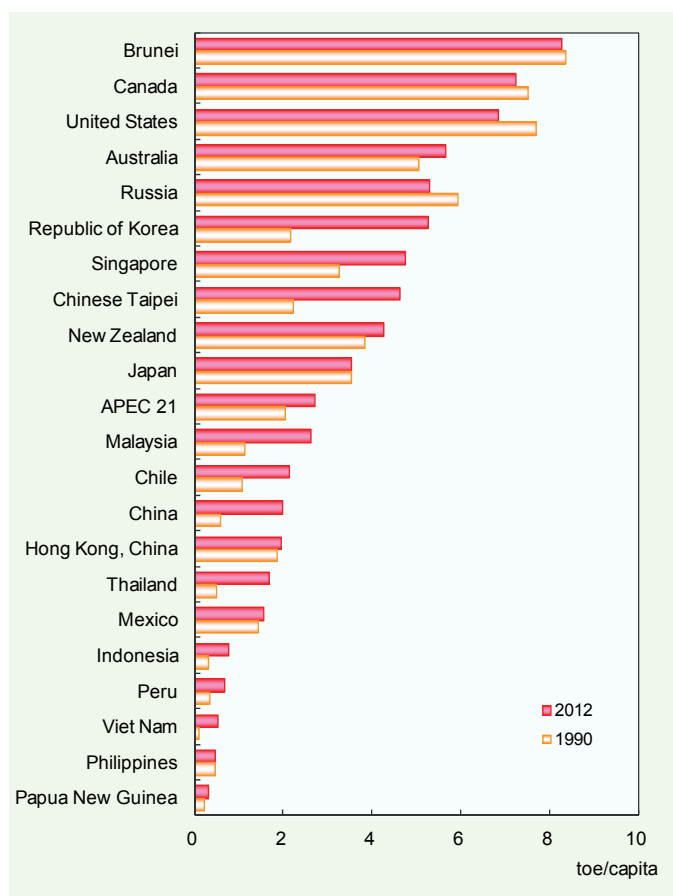
Total Primary Energy Supply per GDP & Capita APEC 21



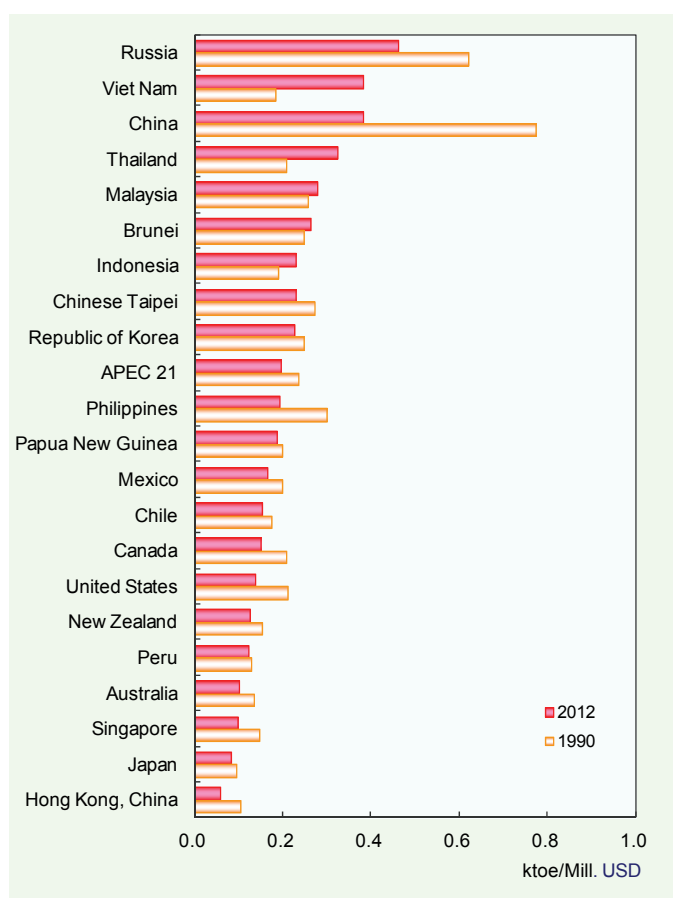
	1990	1995	2000	2005	2010	2012
Population (mill.)	2,284	2,426	2,553	2,654	2,749	2,787
Primary Energy Supply per Capita	2.03	2.06	2.13	2.39	2.60	2.70

	1990	1995	2000	2005	2010	2012
GDP (bill. USD)	19,702	22,190	26,697	31,394	35,892	38,399
Primary Energy Supply per GDP	235.1	225.2	203.6	201.7	199.4	196.2

Total Primary Energy Supply per Capita 1990 – 2012 by Economy

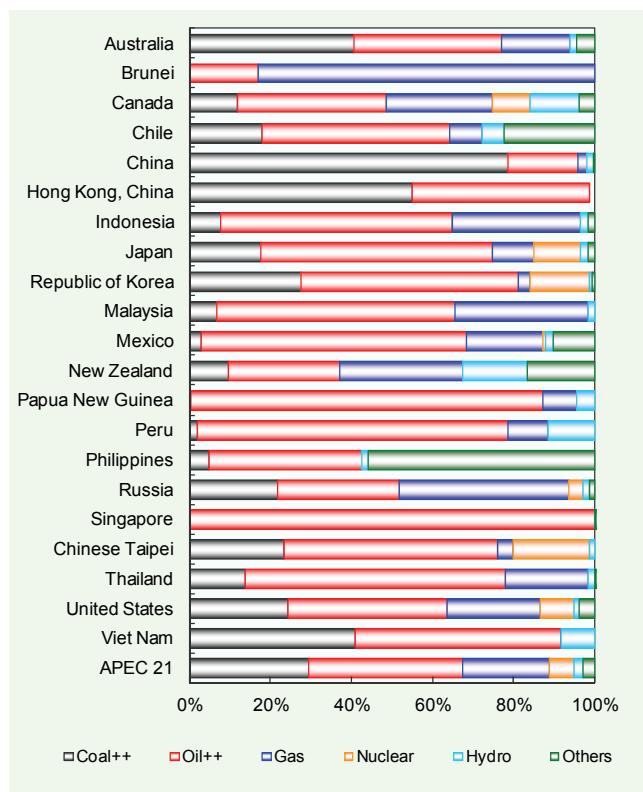


Total Primary Energy Supply per GDP 1990 – 2012 by Economy

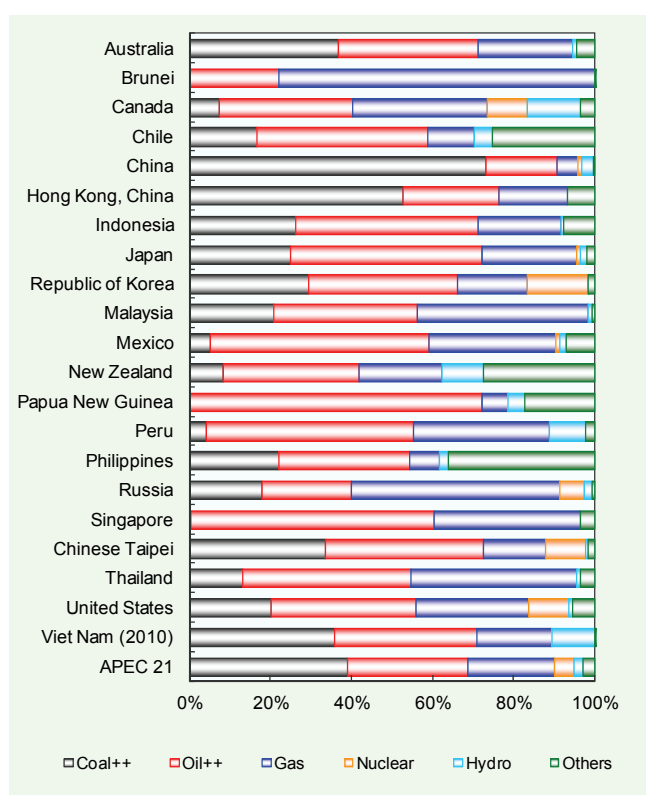


Primary Energy Supply

Primary Energy Mix by Economy 1990

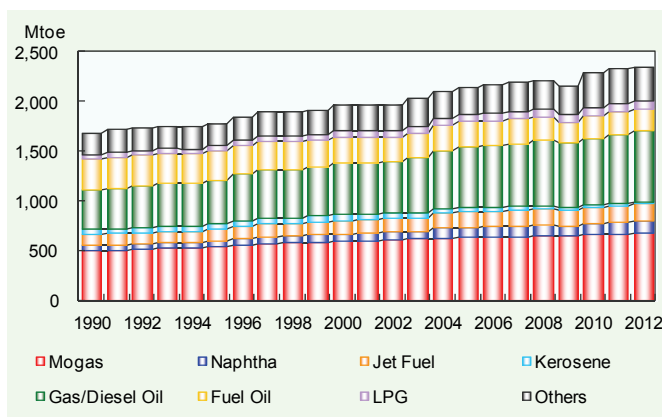


Primary Energy Mix by Economy 2012



Primary Energy Supply

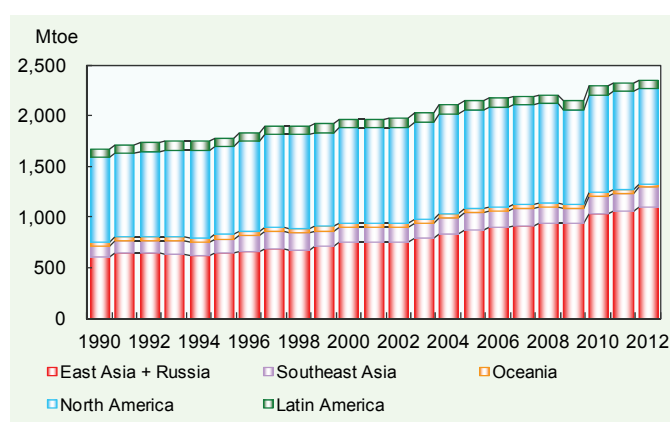
Refining of Petroleum Products by Fuel APEC 21



	Mtoe					
	1990	1995	2000	2005	2010	2012
Mogas	504.4	545.4	597.3	632.5	669.1	685.1
Naphtha	47.7	59.0	72.1	104.5	99.9	112.7
Jet Fuel	120.4	119.7	137.9	156.5	165.2	175.7
Kerosene	41.2	47.2	59.3	45.0	29.0	25.2
Gas/Diesel Oil	401.8	441.7	516.7	604.1	671.7	711.4
Fuel Oil	315.9	298.0	267.0	258.1	228.8	215.6
LPG	42.0	50.8	61.8	68.7	83.8	85.0
Others	207.5	221.3	261.5	280.4	347.9	344.6
Total	1,680.8	1,783.1	1,973.5	2,149.8	2,295.3	2,355.3

	Share (%)					
	1990	1995	2000	2005	2010	2012
Mogas	30.0	30.6	30.3	29.4	29.2	29.1
Naphtha	2.8	3.3	3.7	4.9	4.4	4.8
Jet Fuel	7.2	6.7	7.0	7.3	7.2	7.5
Kerosene	2.4	2.6	3.0	2.1	1.3	1.1
Gas/Diesel Oil	23.9	24.8	26.2	28.1	29.3	30.2
Fuel Oil	18.8	16.7	13.5	12.0	10.0	9.2
LPG	2.5	2.8	3.1	3.2	3.6	3.6
Others	12.3	12.4	13.2	13.0	15.2	14.6

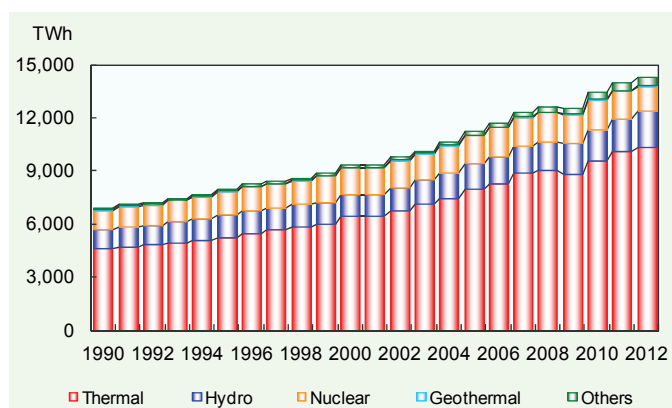
Refining of Petroleum Products by Region APEC 21



	Mtoe					
	1990	1995	2000	2005	2010	2012
East Asia + Russia	614.4	647.4	751.6	877.3	1,035.6	1,108.0
Southeast Asia	109.9	142.6	152.3	166.9	170.9	190.2
Oceania	37.0	41.2	43.5	40.8	38.0	38.1
North America	840.5	867.7	943.5	974.5	964.5	933.0
Latin America	78.9	84.2	82.6	90.3	86.3	86.0
Total	1,680.8	1,783.1	1,973.5	2,149.8	2,295.3	2,355.3

	Share (%)					
	1990	1995	2000	2005	2010	2012
East Asia + Russia	36.6	36.3	38.1	40.8	45.1	47.0
Southeast Asia	6.5	8.0	7.7	7.8	7.4	8.1
Oceania	2.2	2.3	2.2	1.9	1.7	1.6
North America	50.0	48.7	47.8	45.3	42.0	39.6
Latin America	4.7	4.7	4.2	4.2	3.8	3.7

Electricity Power Generation by Type APEC 21

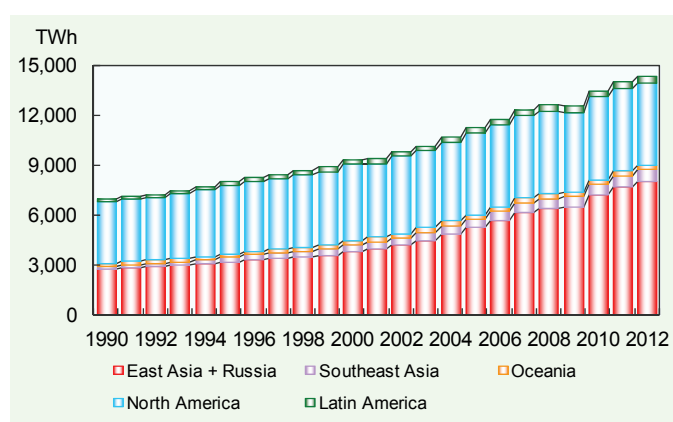


	TWh					
	1990	1995	2000	2005	2010	2012
Thermal	4,622.8	5,263.3	6,438.6	7,957.0	9,585.5	10,390.4
Hydro	1,084.3	1,263.8	1,260.2	1,462.8	1,791.5	1,998.8
Nuclear	1,087.2	1,322.7	1,493.4	1,595.9	1,662.3	1,388.5
Geothermal	31.5	34.1	43.4	47.5	53.0	53.4
Others	119.8	109.4	127.4	189.4	378.5	507.8
Total	6,945.7	7,993.3	9,363.0	11,252.7	13,470.9	14,338.9

	Share (%)					
	1990	1995	2000	2005	2010	2012
Thermal	66.6	65.8	68.8	70.7	71.2	72.5
Hydro	15.6	15.8	13.5	13.0	13.3	13.9
Nuclear	15.7	16.5	16.0	14.2	12.3	9.7
Geothermal	0.5	0.4	0.5	0.4	0.4	0.4
Others	1.7	1.4	1.4	1.7	2.8	3.5

*"Others" comprises power generated from renewable energy.

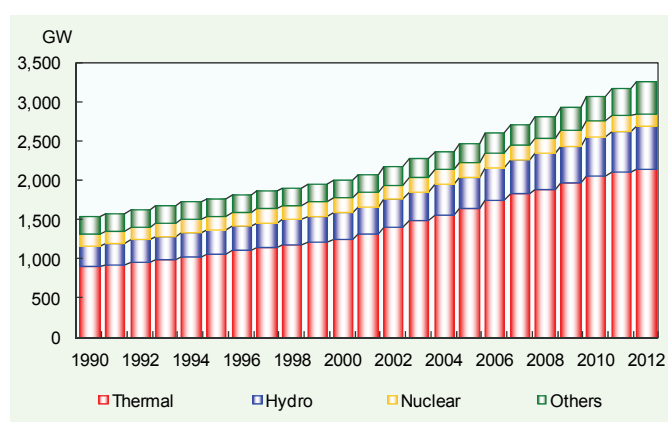
Electricity Power Generation by Region APEC 21



	TWh					
	1990	1995	2000	2005	2010	2012
East Asia + Russia	2,768.5	3,177.5	3,822.6	5,257.4	7,184.8	7,990.0
Southeast Asia	156.7	289.9	393.2	505.1	660.8	743.0
Oceania	188.3	210.4	251.5	274.6	300.8	297.2
North America	3,684.8	4,118.4	4,631.5	4,893.8	4,957.1	4,905.1
Latin America	147.4	197.1	264.2	321.8	367.4	403.5
Total	6,945.7	7,993.3	9,363.0	11,252.7	13,470.9	14,338.9

	Share (%)					
	1990	1995	2000	2005	2010	2012
East Asia + Russia	39.9	39.8	40.8	46.7	53.3	55.7
Southeast Asia	2.3	3.6	4.2	4.5	4.9	5.2
Oceania	2.7	2.6	2.7	2.4	2.2	2.1
North America	53.1	51.5	49.5	43.5	36.8	34.2
Latin America	2.1	2.5	2.8	2.9	2.7	2.8

Power Generation Capacity by Type APEC 21

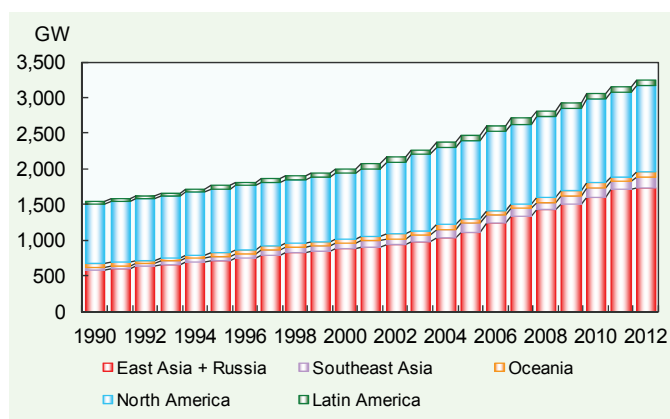


	GW					
	1990	1995	2000	2005	2010	2012
Thermal	905.1	1,065.3	1,257.0	1,640.8	2,055.0	2,144.4
Hydro	264.6	308.9	344.7	392.4	501.8	542.2
Nuclear	158.3	174.4	176.0	192.1	197.7	154.6
Others	220.7	222.9	223.3	246.4	319.6	418.5
Total	1,548.7	1,771.6	2,001.0	2,471.8	3,074.1	3,259.6

	Share (%)					
	1990	1995	2000	2005	2010	2012
Thermal	58.4	60.1	62.8	66.4	66.8	65.8
Hydro	17.1	17.4	17.2	15.9	16.3	16.6
Nuclear	10.2	9.8	8.8	7.8	6.4	4.7
Others	14.3	12.6	11.2	10.0	10.4	12.8

Others comprises power generated from renewable energy.

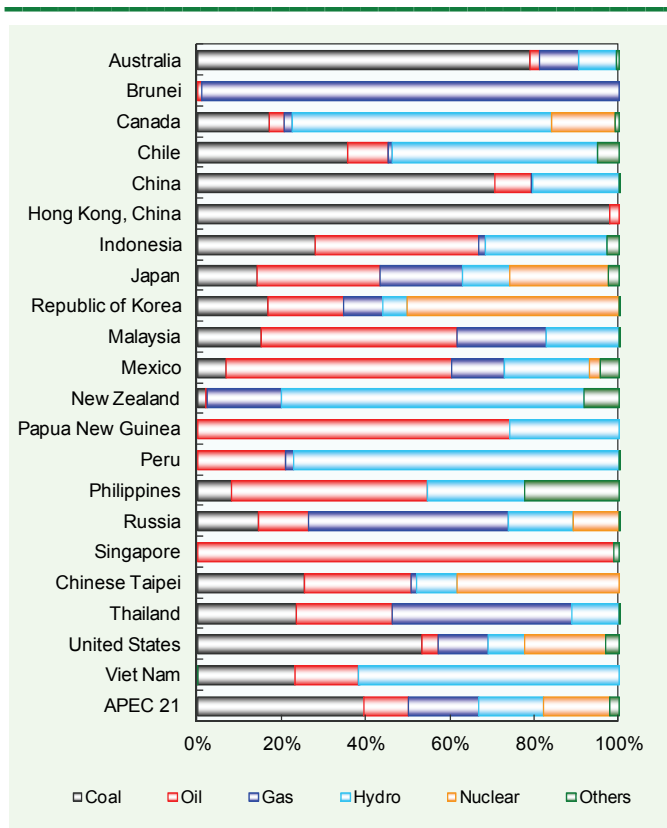
Power Generation Capacity by Region APEC 21



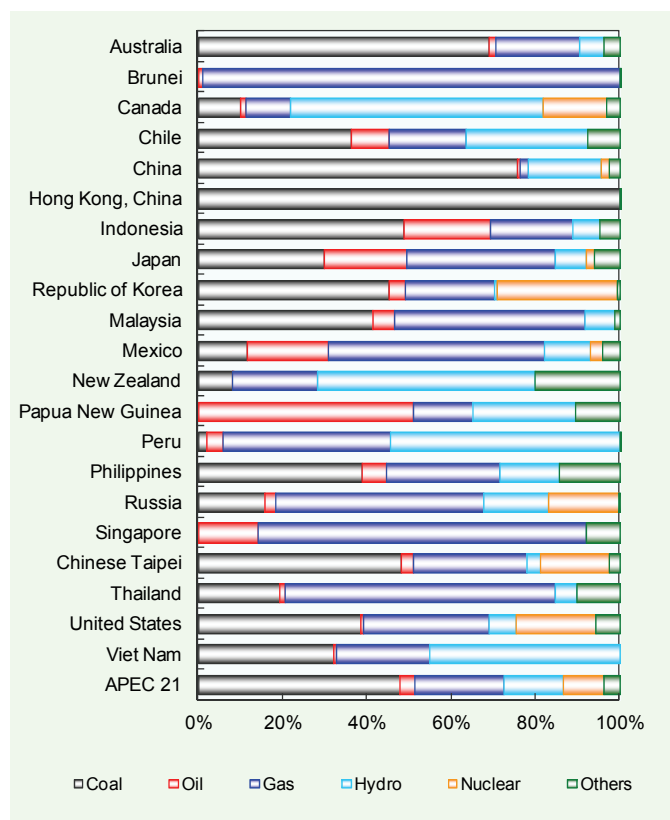
	1990	1995	2000	2005	2010	2012
East Asia + Russia	592.3	723.4	883.6	1,124.5	1,614.7	1,749.6
Southeast Asia	37.0	59.8	82.1	115.4	131.5	148.7
Oceania	46.1	50.6	55.1	58.7	68.0	69.3
North America	837.7	891.8	924.0	1,101.9	1,173.4	1,202.1
Latin America	35.6	46.0	56.3	71.3	86.5	90.0
Total	1,548.7	1,771.6	2,001.0	2,471.8	3,074.1	3,259.6

	1990	1995	2000	2005	2010	2012
East Asia + Russia	38.2	40.8	44.2	45.5	52.5	53.7
Southeast Asia	2.4	3.4	4.1	4.7	4.3	4.6
Oceania	3.0	2.9	2.8	2.4	2.2	2.1
North America	54.1	50.3	46.2	44.6	38.2	36.9
Latin America	2.3	2.6	2.8	2.9	2.8	2.8

Electricity Power Generation by Economy 1990

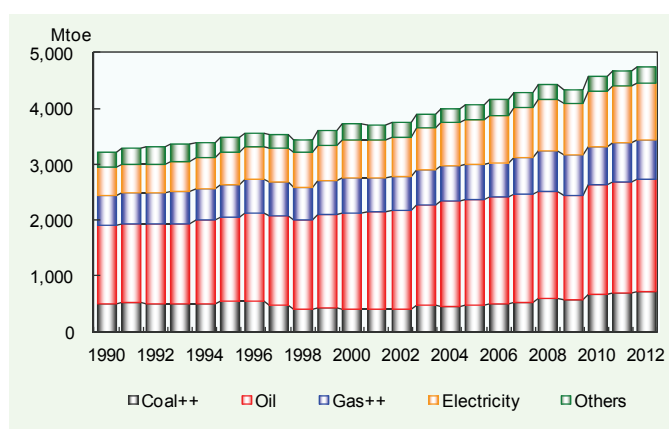


Electricity Power Generation by Economy 2012



Transformation

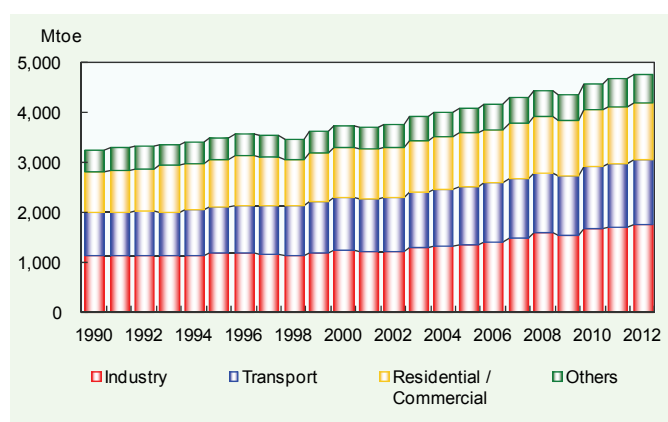
Total Final Energy Consumption by Energy APEC 21



	Mtoe					
	1990	1995	2000	2005	2010	2012
Coal++	519.1	550.0	422.6	491.7	679.8	726.0
Oil	1,388.0	1,519.1	1,718.5	1,897.4	1,965.3	2,007.4
Gas++	551.9	586.5	635.4	616.3	684.0	699.1
Electricity	502.2	563.7	674.3	809.6	975.0	1,037.6
Others	275.9	272.3	273.7	265.3	271.5	287.8
Total	3,237.2	3,491.7	3,724.5	4,080.3	4,575.6	4,757.9

	Share (%)					
	1990	1995	2000	2005	2010	2012
Coal++	16.0	15.8	11.3	12.0	14.9	15.3
Oil	42.9	43.5	46.1	46.5	43.0	42.2
Gas++	17.0	16.8	17.1	15.1	14.9	14.7
Electricity	15.5	16.1	18.1	19.8	21.3	21.8
Others	8.5	7.8	7.3	6.5	5.9	6.0

Total Final Energy Consumption by Sector APEC 21

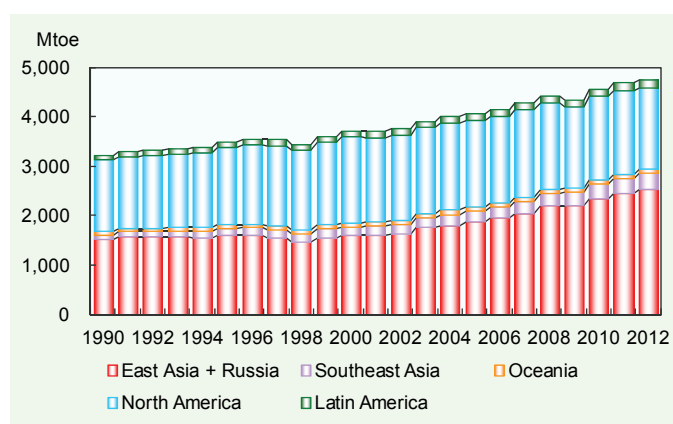


	1990	1995	2000	2005	2010	Mtoe 2012
Industry	1,131.6	1,186.2	1,250.2	1,347.7	1,677.7	1,762.7
Transport	862.4	927.1	1,044.5	1,167.8	1,235.9	1,283.3
Residential / Commercial	819.6	951.8	998.7	1,070.9	1,136.4	1,142.9
Others	423.7	426.6	431.1	493.8	525.5	568.9
Total	3,237.2	3,491.7	3,724.5	4,080.3	4,575.6	4,757.9

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	35.0	34.0	33.6	33.0	36.7	37.0
Transport	26.6	26.6	28.0	28.6	27.0	27.0
Residential / Commercial	25.3	27.3	26.8	26.2	24.8	24.0
Others	13.1	12.2	11.6	12.1	11.5	12.0

Final Energy Consumption

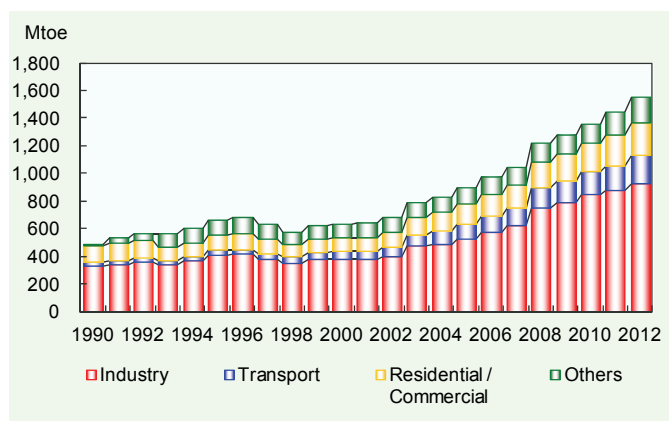
Total Final Energy Consumption by Region APEC 21



	1990	1995	2000	2005	2010	Mtoe 2012
East Asia + Russia	1,521.6	1,611.6	1,606.5	1,877.2	2,352.5	2,551.6
Southeast Asia	96.7	145.2	174.5	220.7	285.7	318.2
Oceania	66.8	74.2	83.4	85.8	90.5	92.9
North America	1,450.4	1,548.4	1,732.2	1,760.5	1,696.9	1,638.6
Latin America	101.6	112.3	127.9	136.1	150.0	156.6
Total	3,237.2	3,491.7	3,724.5	4,080.3	4,575.6	4,757.9

	1990	1995	2000	2005	2010	Share (%) 2012
East Asia + Russia	47.0	46.2	43.1	46.0	51.4	53.6
Southeast Asia	3.0	4.2	4.7	5.4	6.2	6.7
Oceania	2.1	2.1	2.2	2.1	2.0	2.0
North America	44.8	44.3	46.5	43.1	37.1	34.4
Latin America	3.1	3.2	3.4	3.3	3.3	3.3

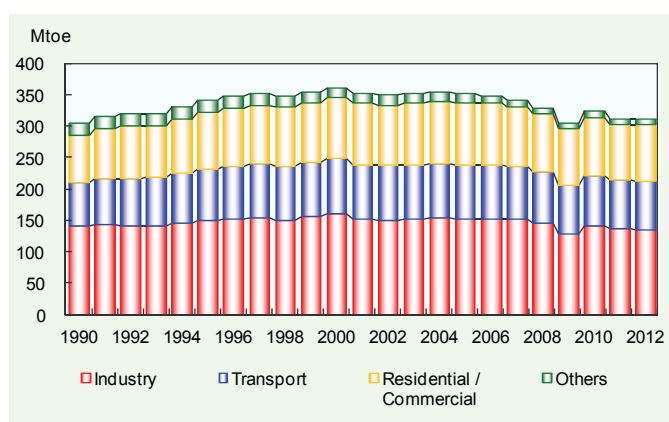
Total Final Energy Consumption by Sector China



	1990	1995	2000	2005	2010	Mtoe 2012
Industry	329.8	410.0	379.3	527.9	848.6	932.0
Transport	28.8	36.4	60.1	105.0	166.5	202.7
Residential / Commercial	118.4	107.0	96.0	153.4	204.4	236.8
Others	13.0	107.3	99.3	117.4	136.3	180.8
Total	489.9	660.7	634.7	903.6	1,355.9	1,552.5

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	67.3	62.1	59.8	58.4	62.6	60.0
Transport	5.9	5.5	9.5	11.6	12.3	13.1
Residential / Commercial	24.2	16.2	15.1	17.0	15.1	15.3
Others	2.6	16.2	15.6	13.0	10.1	11.6

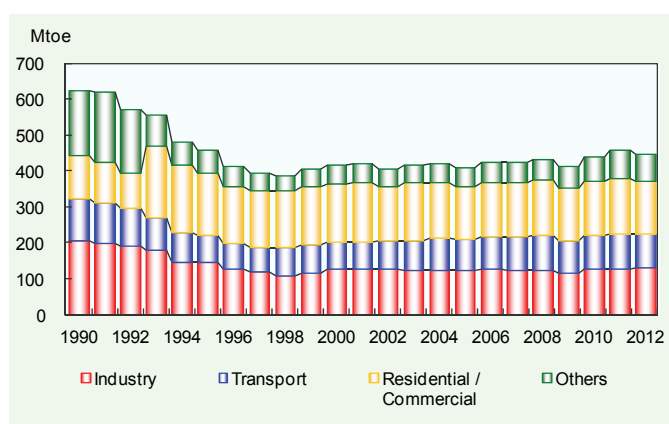
Total Final Energy Consumption by Sector Japan



	1990	1995	2000	2005	2010	Mtoe 2012
Industry	141.3	150.9	161.5	152.7	141.2	134.5
Transport	70.0	81.4	87.4	86.9	80.3	78.2
Residential / Commercial	75.0	89.6	96.5	98.8	92.6	89.8
Others	19.5	19.0	16.7	13.9	9.5	9.1
Total	305.8	340.9	362.1	352.3	323.7	311.6

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	46.2	44.3	44.6	43.4	43.6	43.2
Transport	22.9	23.9	24.1	24.7	24.8	25.1
Residential / Commercial	24.5	26.3	26.7	28.0	28.6	28.8
Others	6.4	5.6	4.6	3.9	2.9	2.9

Total Final Energy Consumption by Sector Russia

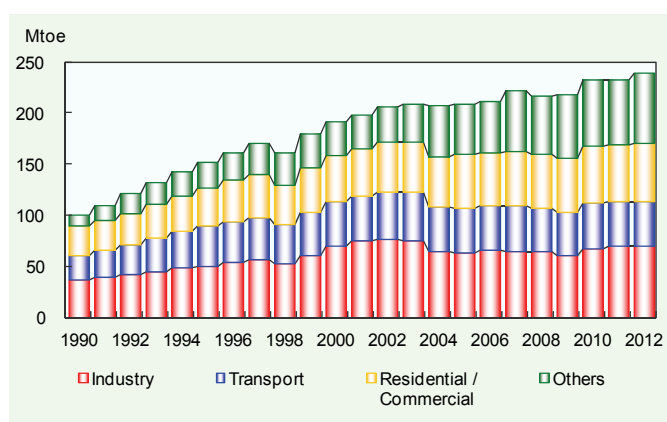


	1990	1995	2000	2005	2010	Mtoe 2012
Industry	208.7	146.7	128.6	123.7	126.6	131.4
Transport	115.9	76.1	74.5	88.6	96.5	93.6
Residential / Commercial	119.7	172.4	162.9	145.3	148.5	145.8
Others	180.7	63.1	51.9	54.4	69.1	77.7
Total	625.0	458.3	417.9	412.0	440.7	448.6

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	33.4	32.0	30.8	30.0	28.7	29.3
Transport	18.5	16.6	17.8	21.5	21.9	20.9
Residential / Commercial	19.2	37.6	39.0	35.3	33.7	32.5
Others	28.9	13.8	12.4	13.2	15.7	17.3

Final Energy Consumption

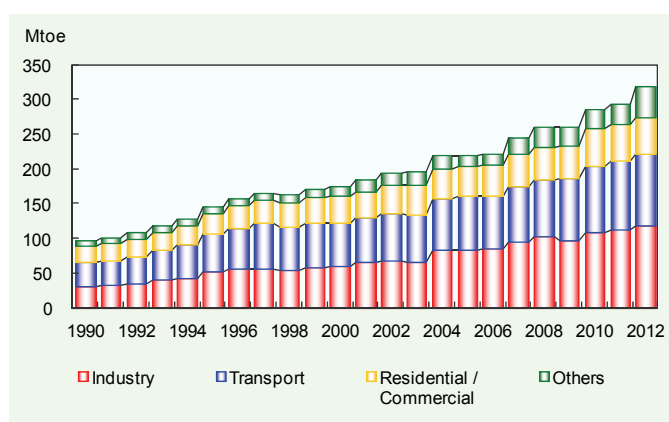
Total Final Energy Consumption by Sector Other East Asia



	1990	1995	2000	2005	2010	Mtoe 2012
Industry	36.4	50.5	69.6	63.4	68.0	70.1
Transport	24.4	38.8	44.5	44.2	44.0	44.2
Residential / Commercial	28.7	37.6	44.7	52.3	55.7	56.7
Others	11.4	24.8	33.1	49.4	64.5	67.9
Total	100.9	151.7	191.9	209.4	232.2	239.0

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	36.1	33.3	36.3	30.3	29.3	29.3
Transport	24.2	25.6	23.2	21.1	18.9	18.5
Residential / Commercial	28.4	24.8	23.3	25.0	24.0	23.7
Others	11.3	16.3	17.2	23.6	27.8	28.4

Total Final Energy Consumption by Sector Southeast Asia

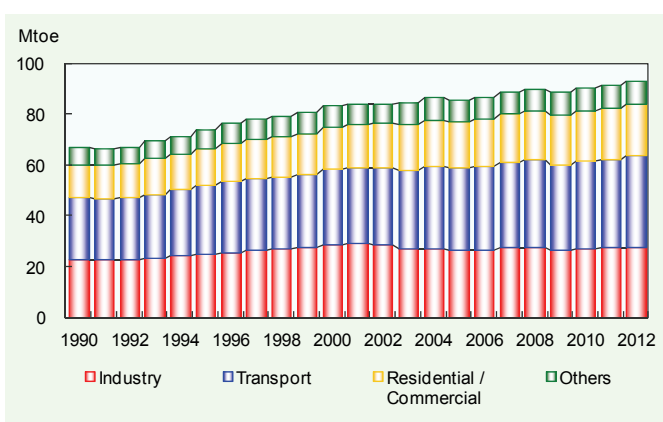


	1990	1995	2000	2005	2010	Mtoe 2012
Industry	31.4	52.4	60.7	84.3	109.5	118.2
Transport	34.3	54.0	62.4	77.7	94.9	103.4
Residential / Commercial	23.1	29.5	38.4	43.1	54.5	53.3
Others	8.0	9.2	13.0	15.6	26.8	43.3
Total	96.7	145.2	174.5	220.7	285.7	318.2

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	32.4	36.1	34.8	38.2	38.3	37.1
Transport	35.5	37.2	35.7	35.2	33.2	32.5
Residential / Commercial	23.8	20.3	22.0	19.5	19.1	16.8
Others	8.3	6.4	7.5	7.1	9.4	13.6

Final Energy Consumption

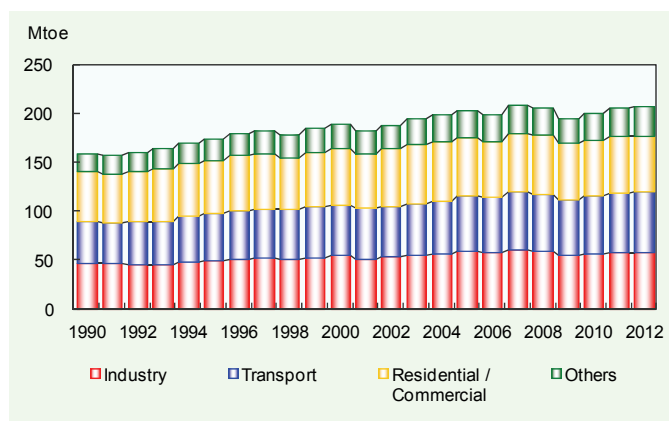
Total Final Energy Consumption by Sector Oceania



	1990	1995	2000	2005	2010	Mtoe 2012
Industry	22.9	25.1	28.5	26.8	27.3	27.6
Transport	24.3	27.0	30.0	32.0	34.3	36.2
Residential / Commercial	13.0	14.6	16.5	18.1	19.9	20.1
Others	6.6	7.5	8.4	8.9	9.0	9.0
Total	66.8	74.2	83.4	85.8	90.5	92.9

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	34.3	33.8	34.2	31.3	30.2	29.7
Transport	36.3	36.4	36.0	37.3	37.9	39.0
Residential / Commercial	19.5	19.7	19.8	21.1	22.0	21.7
Others	9.9	10.1	10.0	10.3	9.9	9.7

Total Final Energy Consumption by Sector Canada

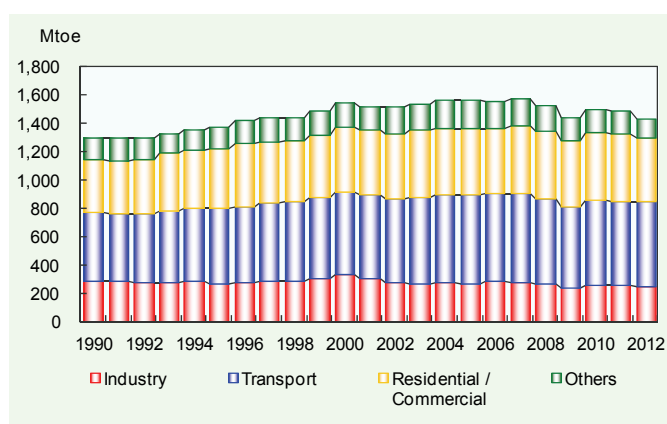


	1990	1995	2000	2005	2010	2012
Industry	47.3	50.1	54.7	59.7	57.1	58.7
Transport	43.1	47.8	52.1	56.5	59.2	60.8
Residential / Commercial	50.4	53.8	58.0	59.4	56.0	57.2
Others	17.9	21.7	23.9	26.8	27.4	30.7
Total	158.8	173.4	188.7	202.4	199.6	207.4

	1990	1995	2000	2005	2010	2012
Industry	29.8	28.9	29.0	29.5	28.6	28.3
Transport	27.2	27.5	27.6	27.9	29.6	29.3
Residential / Commercial	31.8	31.0	30.7	29.3	28.0	27.6
Others	11.3	12.5	12.7	13.2	13.7	14.8

Final Energy Consumption

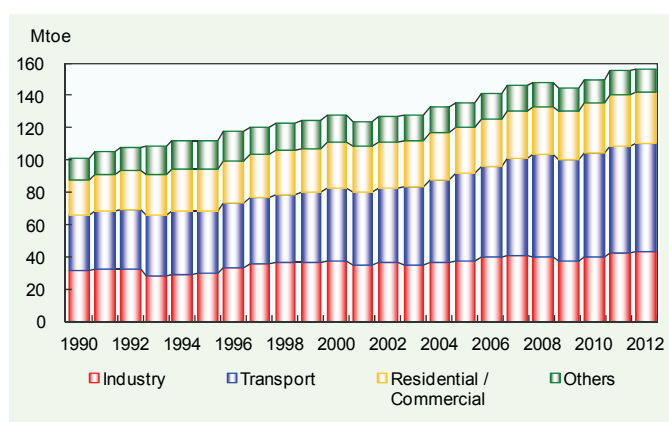
Total Final Energy Consumption by Sector United States of America



	1990	1995	2000	2005	2010	Mtoe 2012
Industry	281.8	270.0	329.5	271.4	259.4	246.6
Transport	487.6	527.6	588.2	622.9	595.3	597.4
Residential / Commercial	369.2	421.0	457.1	472.1	474.4	451.4
Others	153.1	156.4	168.6	191.7	168.2	135.7
Total	1,291.6	1,375.0	1,543.5	1,558.1	1,497.3	1,431.2

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	21.8	19.6	21.3	17.4	17.3	17.2
Transport	37.7	38.4	38.1	40.0	39.8	41.7
Residential / Commercial	28.6	30.6	29.6	30.3	31.7	31.5
Others	11.9	11.4	10.9	12.3	11.2	9.5

Total Final Energy Consumption by Sector Latin America

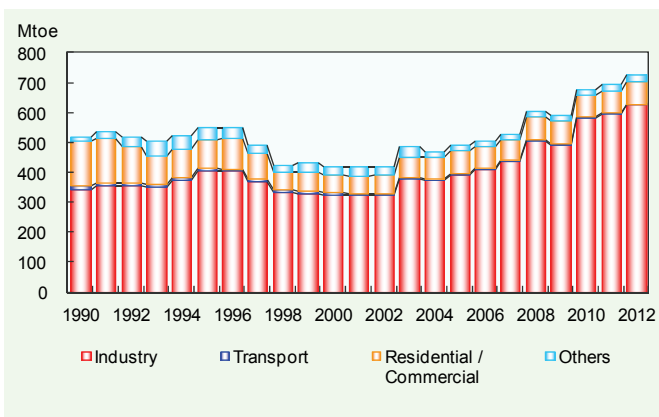


	1990	1995	2000	2005	2010	Mtoe 2012
Industry	31.9	30.4	37.9	37.7	40.0	43.5
Transport	34.1	38.1	45.2	54.1	65.0	66.7
Residential / Commercial	22.1	26.2	28.6	28.6	30.3	31.7
Others	13.5	17.6	16.2	15.7	14.6	14.6
Total	101.6	112.3	127.9	136.1	150.0	156.6

	1990	1995	2000	2005	2010	Share (%) 2012
Industry	31.4	27.1	29.6	27.7	26.6	27.8
Transport	33.5	33.9	35.4	39.8	43.4	42.6
Residential / Commercial	21.8	23.3	22.3	21.0	20.2	20.3
Others	13.3	15.7	12.7	11.5	9.8	9.3

Final Energy Consumption

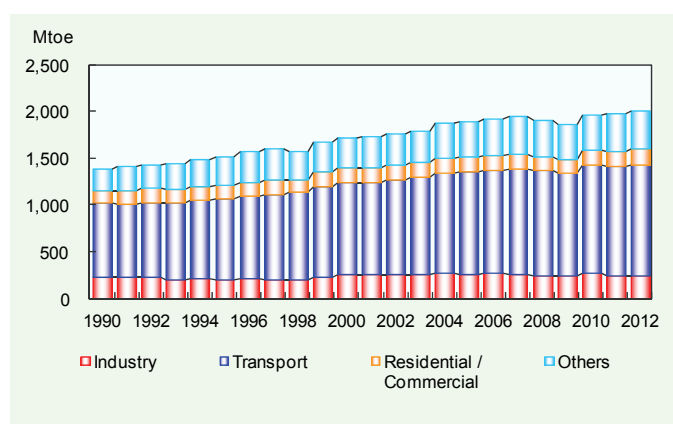
Coal++ Demand by Sector APEC 21



	1990	1995	2000	2005	2010	2012
Industry	345.7	406.8	327.6	391.6	582.7	627.1
Transport	11.2	7.1	5.6	5.7	3.5	3.3
Residential / Commercial	148.6	97.0	60.8	78.0	72.8	72.7
Others	13.6	39.1	28.5	16.4	20.9	22.9
Total	519.1	550.0	422.6	491.7	679.8	726.0

	1990	1995	2000	2005	2010	2012
Industry	66.6	74.0	77.5	79.6	85.7	86.4
Transport	2.2	1.3	1.3	1.1	0.5	0.5
Residential / Commercial	28.6	17.6	14.4	15.9	10.7	10.0
Others	2.6	7.1	6.7	3.3	3.1	3.2

Oil Demand by Sector APEC 21

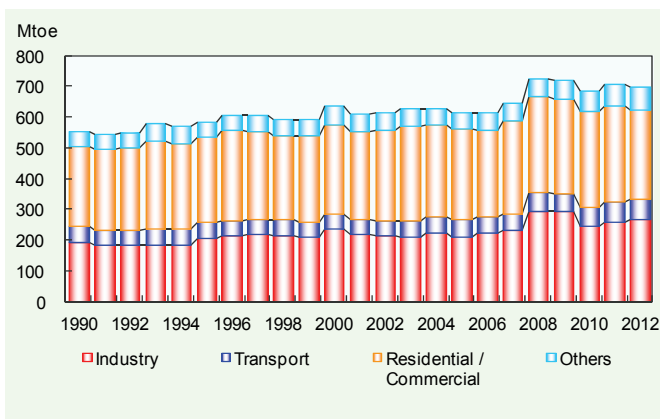


	Mtoe					
	1990	1995	2000	2005	2010	2012
Industry	237.9	204.9	256.0	264.4	275.5	241.7
Transport	786.2	858.7	980.6	1,093.6	1,150.7	1,194.9
Residential / Commercial	135.1	147.5	163.9	164.4	157.3	168.4
Others	228.9	308.0	318.0	375.1	381.8	402.4
Total	1,388.0	1,519.1	1,718.5	1,897.4	1,965.3	2,007.4

	Share (%)					
	1990	1995	2000	2005	2010	2012
Industry	17.1	13.5	14.9	13.9	14.0	12.0
Transport	56.6	56.5	57.1	57.6	58.6	59.5
Residential / Commercial	9.7	9.7	9.5	8.7	8.0	8.4
Others	16.5	20.3	18.5	19.8	19.4	20.0

Final Energy Consumption

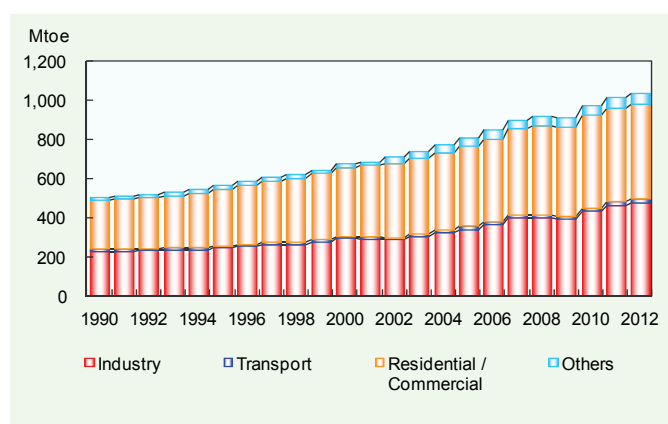
Gas++ Demand by Sector APEC 21



	1990	1995	2000	2005	2010	2012
Industry	194.3	206.2	236.3	213.0	244.1	269.2
Transport	52.5	51.1	47.3	54.1	64.5	65.5
Residential / Commercial	257.4	278.6	293.8	293.6	309.4	287.8
Others	47.8	50.6	58.0	55.6	66.0	76.6
Total	551.9	586.5	635.4	616.3	684.0	699.1

	1990	1995	2000	2005	2010	2012
Industry	35.2	35.2	37.2	34.6	35.7	38.5
Transport	9.5	8.7	7.4	8.8	9.4	9.4
Residential / Commercial	46.6	47.5	46.2	47.6	45.2	41.2
Others	8.7	8.6	9.1	9.0	9.6	11.0

Electricity Demand by Sector APEC 21

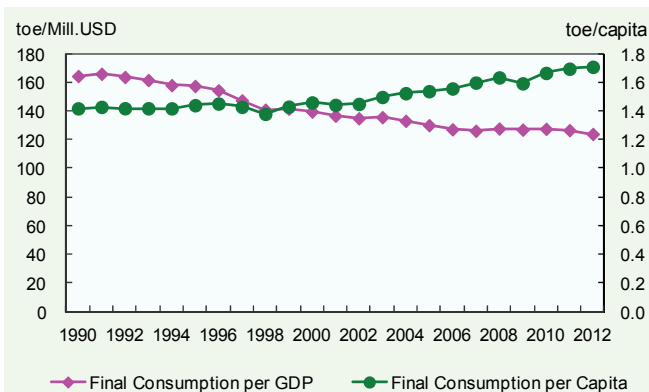


	Mtoe					
	1990	1995	2000	2005	2010	2012
Industry	229.7	246.0	293.3	341.2	432.3	476.6
Transport	12.6	10.1	10.9	14.5	17.2	19.6
Residential / Commercial	246.8	291.6	352.6	412.1	474.3	482.9
Others	13.1	16.0	17.5	41.9	51.1	58.5
Total	502.2	563.7	674.3	809.6	975.0	1,037.6

	Share (%)					
	1990	1995	2000	2005	2010	2012
Industry	45.7	43.6	43.5	42.1	44.3	45.9
Transport	2.5	1.8	1.6	1.8	1.8	1.9
Residential / Commercial	49.1	51.7	52.3	50.9	48.6	46.5
Others	2.6	2.8	2.6	5.2	5.2	5.6

Final Energy Consumption

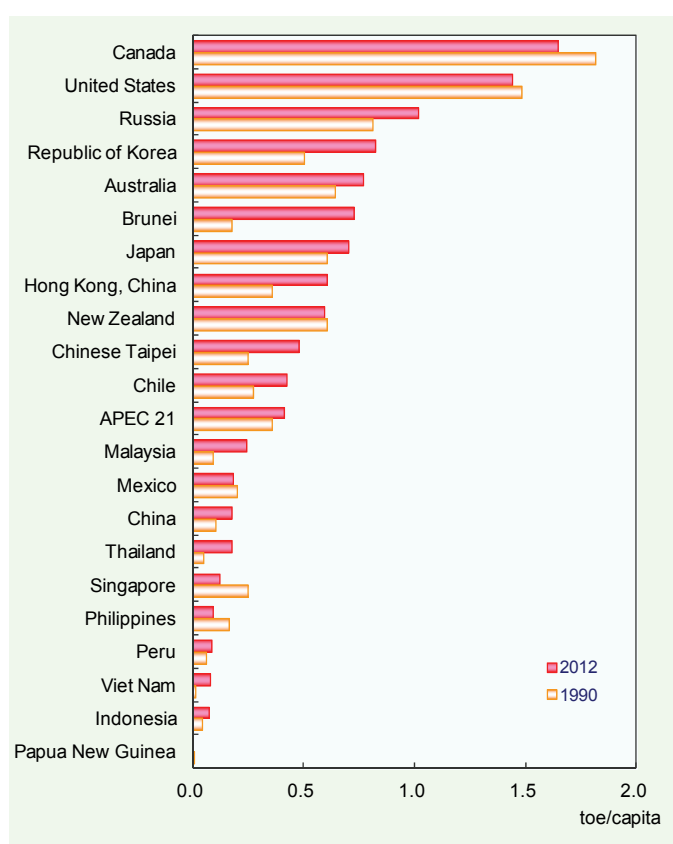
Final Consumption per Capita and GDP APEC 21



	1990	1995	2000	2005	2010	2012
Population (mill.)	2,284	2,426	2,553	2,654	2,749	2,787
Final Consumption per Capita	1.42	1.44	1.46	1.54	1.66	1.71

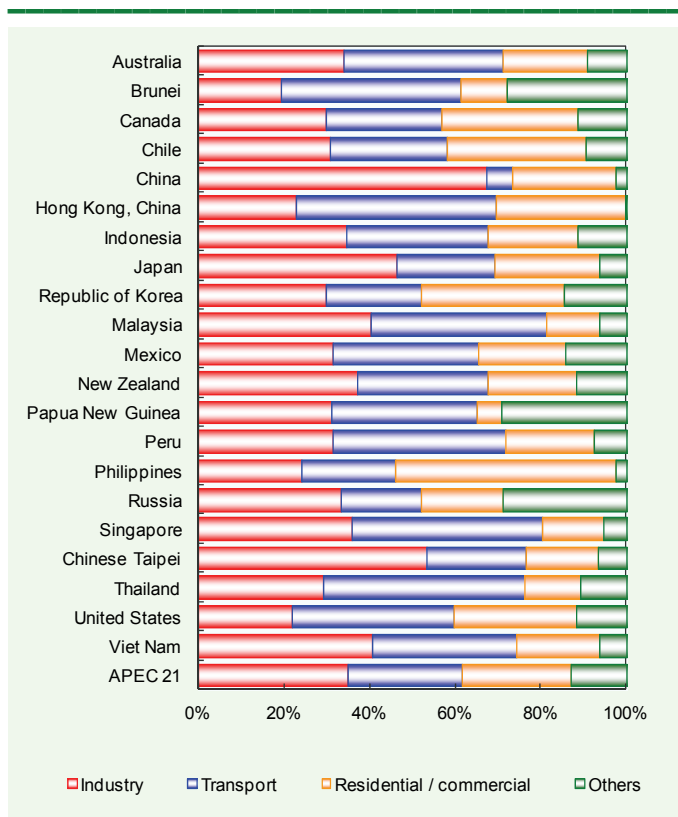
	1990	1995	2000	2005	2010	2012
GDP (bill. US\$)	19,702	22,190	26,697	31,394	35,892	38,399
Final Consumption per GDP	164.31	157.35	139.51	129.97	127.48	123.90

Electricity Consumption in Residential/Commercial: APEC 21

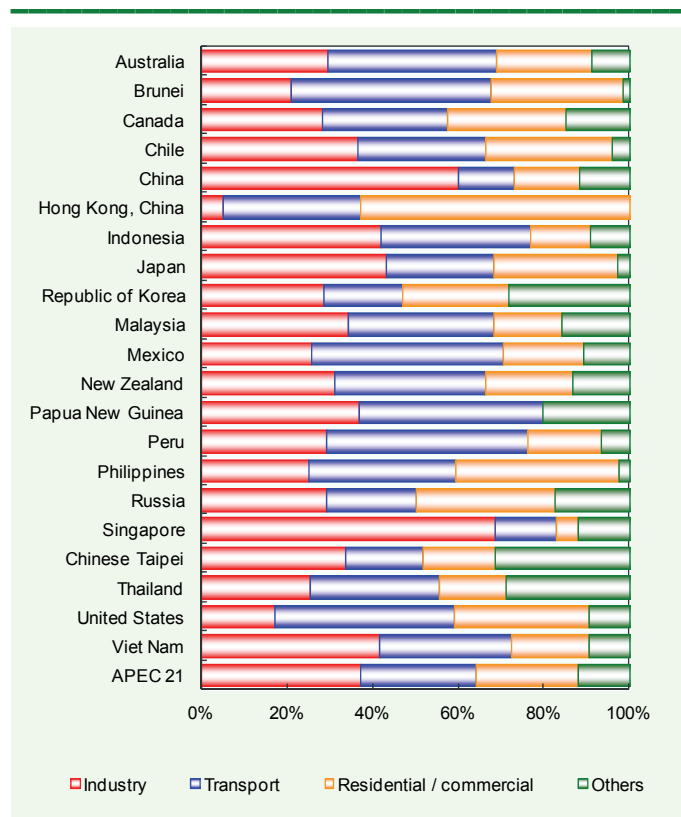


Final Energy Consumption

Final Energy Consumption by Sector 1990

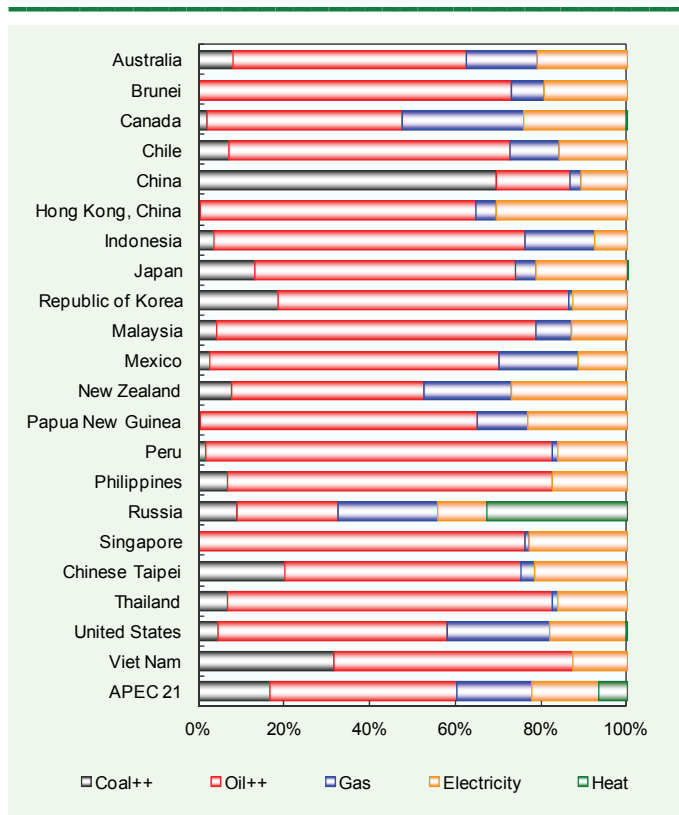


Final Energy Consumption by Sector 2012

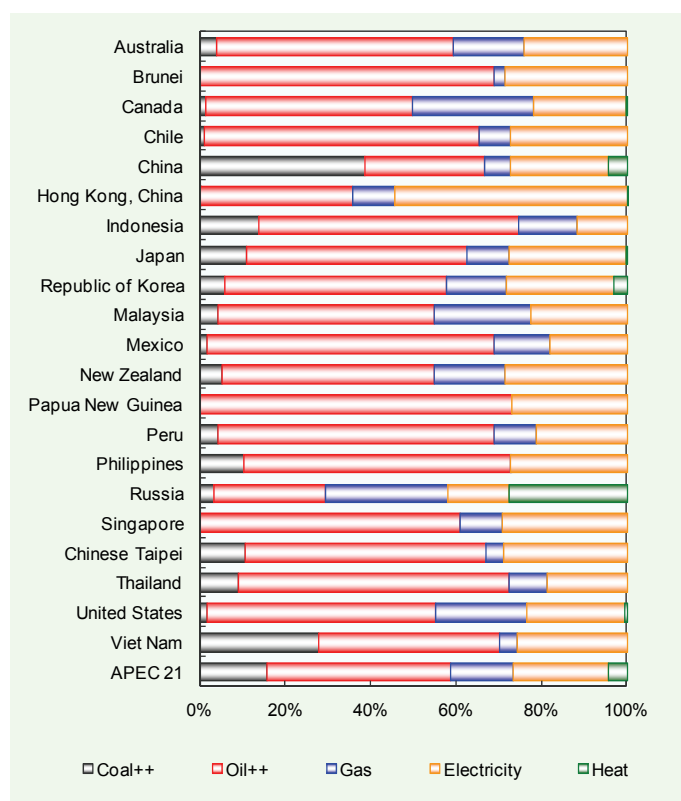


Final Energy Consumption

Final Energy Consumption by Energy 1990



Final Energy Consumption by Energy 2012



Final Energy Consumption

APEC 21, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	3,112,539	-	1,634,016	-
2 Import	442,100	9,637	1,326,741	479,915
3 Export	-568,042	-4,306	-524,598	-509,540
4 International Marine Bunkers	-	-	-	-86,190
5 International Aviation Bunkers	-	-	-	-71,308
6 Stock Change	-69,272	446	-10,906	-5,222
7 Total Primary Energy Supply	2,917,325	5,777	2,425,254	-192,345
8 Transfers	-	-	-68,636	88,805
9 Main Activity Producer	-1,539,184	-7,365	-12,968	-67,119
10 Autoproducers	-178,146	-33,766	-810	-31,251
11 Gas Processing	-6,347	-371	803	-2,494
12 Petroleum Refineries	-	-	-2,362,632	2,355,262
13 Coal Transformation	-441,095	200,468	-	-893
14 Other Transformation	-	-	45,545	-64,390
15 Loss & Own Use	-56,935	-16,611	-10,829	-89,708
16 Discrepancy	-101,169	-16,576	-5,840	1,620
17 Total Final Energy Consumption	594,449	131,557	9,867	1,997,485
18 Industry Sector	502,015	125,119	239	241,413
19 Transport Sector	3,315	1	-	1,194,885
20 Other Sector	89,118	6,438	52	260,667
20.1 Residential & Commercial	66,808	5,874	-	168,366
20.2 Agriculture	9,825	391	10	51,742
20.3 Other	12,485	173	42	40,558
21 Non-energy	-	-	9,576	300,520

Australia, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	239,898	-	23,007	-
2 Import	-	24	24,086	18,167
3 Export	-194,620	-	-14,625	-2,317
4 International Marine Bunkers	-	-	-	-859
5 International Aviation Bunkers	-	-	-	-3,183
6 Stock Change	1,957	-359	289	-149
7 Total Primary Energy Supply	47,235	-335	32,758	11,658
8 Transfers	-	-	272	4,006
9 Main Activity Producer	-42,156	-33	-	-207
10 Autoproducers	-	-69	-	-659
11 Gas Processing	-	-	-	-6
12 Petroleum Refineries	-	-	-33,154	31,229
13 Coal Transformation	-3,221	1,655	-	-
14 Other Transformation	-	-	324	-
15 Loss & Own Use	-	-550	-58	-3,758
16 Discrepancy	123	134	-127	-954
17 Total Final Energy Consumption	1,981	802	14	41,309
18 Industry Sector	1,827	783	14	3,992
19 Transport Sector	148	-	-	30,185
20 Other Sector	6	19	-	2,960
20.1 Residential & Commercial	6	19	-	934
20.2 Agriculture	-	-	-	2,026
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	4,172

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
1,616,904	171,524	361,860	65,283	165,224	-	-	7,127,349
362,270	-	-	-	1,354	9,454	-	2,631,470
-367,211	-	-	-	-1,040	-10,167	-	-1,984,903
-	-	-	-	-	-	-	-86,190
-	-	-	-	-	-	-	-71,308
2,099	-	-	-	-211	-	-	-83,067
1,614,061	171,524	361,860	65,283	165,326	-713	-	7,533,351
-	-	-	-	-	-	-	20,168
-603,191	-167,648	-361,860	-59,866	-20,619	1,129,172	118,442	-1,592,227
-125,755	-3,876	-	-2,467	-33,283	103,896	134,160	-171,298
-10,558	-	-	-	-	-	-	-18,966
-	-	-	-	-	-	-	-7,370
-63	-	-	-	-	-	-	-241,582
-2,574	-	-	-	-37,918	-	-	-59,337
-172,786	-	-	-	-207	-193,161	-45,639	-585,877
-36	0	-	-0	4,193	-1,629	428	-119,009
699,099	-	-	2,949	77,493	1,037,564	207,390	4,757,852
269,156	-	-	276	44,056	476,612	103,807	1,762,692
65,503	-	-	-	-	19,586	-	1,283,290
293,682	-	-	2,673	33,437	541,365	103,583	1,331,016
287,832	-	-	2,647	32,841	482,900	95,680	1,142,949
2,706	-	-	26	590	16,391	5,235	86,916
3,144	-	-	0	6	42,074	2,668	101,150
70,758	-	-	-	-	-	-	380,854

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
47,302	1,206	-	927	5,061	-	-	317,402
4,997	-	-	-	-	-	-	47,273
-22,516	-	-	-	-	-	-	-234,078
-	-	-	-	-	-	-	-859
-	-	-	-	-	-	-	-3,183
-	-	-	-	-	-	-	1,739
29,782	1,206	-	927	5,061	-	-	128,293
-	-	-	-	-	-	-	4,278
-8,484	-1,206	-	-527	-181	19,803	-	-32,993
-2,602	-	-	-128	-496	1,601	-	-2,352
-255	-	-	-	-	-	-	-261
-	-	-	-	-	-	-	-1,925
-62	-	-	-	-	-	-	-1,628
-	-	-	-	-324	-	-	-0
-6,215	-	-	-	-	-3,402	-	-13,982
199	-	-	-	0	0	-	-625
12,364	-	-	272	4,060	18,002	-	78,805
6,941	-	-	-	2,686	6,876	-	23,120
475	-	-	-	-	350	-	31,158
4,298	-	-	272	1,374	10,776	-	19,704
4,295	-	-	272	1,374	10,577	-	17,477
3	-	-	-	-	199	-	2,227
-	-	-	-	-	-	-	-
650	-	-	-	-	-	-	4,822

Brunei Darussalam, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	-	-	8,448	-
2 Import	-	-	8	377
3 Export	-	-	-7,896	-77
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-85
6 Stock Change	-	-	-31	6
7 Total Primary Energy Supply	-	-	530	220
8 Transfers	-	-	-	-
9 Main Activity Producer	-	-	-	-11
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	17
12 Petroleum Refineries	-	-	-513	438
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-	-	-	-12
16 Discrepancy	-	-	-17	13
17 Total Final Energy Consumption	-	-	-	666
18 Industry Sector	-	-	-	185
19 Transport Sector	-	-	-	451
20 Other Sector	-	-	-	17
20.1 Residential & Commercial	-	-	-	17
20.2 Agriculture	-	-	-	0
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	14

Canada, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	33,541	-	185,582	-
2 Import	5,403	223	36,541	12,722
3 Export	-20,513	-275	-128,180	-23,383
4 International Marine Bunkers	-	-	-	-492
5 International Aviation Bunkers	-	-	-	-1,004
6 Stock Change	80	-93	640	38
7 Total Primary Energy Supply	18,509	-146	94,583	-12,118
8 Transfers	-	-	-5,835	20,074
9 Main Activity Producer	-14,393	-	-	-1,224
10 Autoproducers	-1	-	-	-533
11 Gas Processing	-	-	803	-
12 Petroleum Refineries	-	-	-96,373	97,177
13 Coal Transformation	-2,505	1,100	-	-
14 Other Transformation	-	-	1,763	-
15 Loss & Own Use	-	-	-	-8,276
16 Discrepancy	-199	247	5,059	1,228
17 Total Final Energy Consumption	1,412	1,202	-	96,327
18 Industry Sector	1,396	1,202	-	7,519
19 Transport Sector	-	-	-	57,961
20 Other Sector	16	-	-	8,343
20.1 Residential & Commercial	16	-	-	5,232
20.2 Agriculture	-	-	-	3,111
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	22,504

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
11,568	-	-	0	-	-	-	20,016
-	-	-	-	-	-	-	384
-8,899	-	-	-	-	-	-	-16,872
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-85
-12	-	-	-	-	-	-	-37
2,656	-	-	0	-	-	-	3,406
-	-	-	-	-	-	-	-
-1,107	-	-	-0	-	303	-	-815
-217	-	-	-	-	35	-	-182
-256	-	-	-	-	-	-	-239
-	-	-	-	-	-	-	-74
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-1,064	-	-	-	-	-62	-	-1,138
13	-	-	-	-	-0	-	9
26	-	-	-	-	276	-	968
-	-	-	-	-	18	-	203
-	-	-	-	-	-	-	451
26	-	-	-	-	258	-	300
26	-	-	-	-	258	-	300
-	-	-	-	-	-	-	0
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	14

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
129,952	32,724	24,721	1,004	12,199	-	-	419,723
26,077	-	-	-	883	936	-	82,785
-73,524	-	-	-	-679	-4,976	-	-251,532
-	-	-	-	-	-	-	-492
-	-	-	-	-	-	-	-1,004
1,003	-	-	-	-	-	-	1,668
83,507	32,724	24,721	1,004	12,403	-4,040	-	251,148
-	-	-	-	-	-	-	14,239
-11,113	-29,969	-24,721	-1,003	-10	49,641	513	-32,279
-3,197	-2,755	-	-0	-2,168	4,912	50	-3,692
-2,312	-	-	-	-	-	-	-1,509
-	-	-	-	-	-	-	805
-	-	-	-	-	-	-	-1,405
-902	-	-	-	-1,763	-	-	-901
-14,312	-	-	-	-1	-7,357	-	-29,947
4,577	-	-	0	-0	9	27	10,948
56,250	-	-	-	8,461	43,165	591	207,406
25,926	-	-	-	5,921	16,127	590	58,682
2,478	-	-	-	-	361	-	60,800
24,378	-	-	-	2,540	26,677	0	61,954
23,571	-	-	-	2,539	25,890	0	57,248
807	-	-	-	0	788	-	4,706
-	-	-	-	-	-	-	-
3,467	-	-	-	-	-	-	25,971

Chile, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	295	-	531	-
2 Import	5,912	38	8,850	7,730
3 Export	-	-	-	-874
4 International Marine Bunkers	-	-	-	-166
5 International Aviation Bunkers	-	-	-	-712
6 Stock Change	-113	32	125	124
7 Total Primary Energy Supply	6,094	69	9,507	6,102
8 Transfers	-	-	1,079	-1,040
9 Main Activity Producer	-5,671	-	-	-1,195
10 Autoproducers	-	-	-	-613
11 Gas Processing	-	-	-	-15
12 Petroleum Refineries	-	-	-10,677	9,260
13 Coal Transformation	-457	190	-	-
14 Other Transformation	-	-	11	-11
15 Loss & Own Use	-	-237	-	-331
16 Discrepancy	212	-8	80	431
17 Total Final Energy Consumption	178	14	-	12,589
18 Industry Sector	175	14	-	2,946
19 Transport Sector	-	-	-	7,391
20 Other Sector	2	-	-	1,769
20.1 Residential & Commercial	-	-	-	1,490
20.2 Agriculture	-	-	-	-
20.3 Other	2	-	-	278
21 Non Energy	-	-	-	483

China, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	1,869,264	-	207,478	-
2 Import	145,914	52	271,027	50,028
3 Export	-5,193	-694	-2,432	-26,876
4 International Marine Bunkers	-	-	-	-1,497
5 International Aviation Bunkers	-	-	-	-2,642
6 Stock Change	-65,233	1,487	-9,226	-11,335
7 Total Primary Energy Supply	1,944,753	845	466,847	7,678
8 Transfers	-	-	-	-
9 Main Activity Producer	-848,015	-1,387	-109	-3,573
10 Autoproducers	-138,795	-23,464	-14	-3,636
11 Gas Processing	-4,378	-371	-	-
12 Petroleum Refineries	-	-	-459,335	495,153
13 Coal Transformation	-313,770	130,731	-	-
14 Other Transformation	-	-	-	-52,696
15 Loss & Own Use	-55,521	-6,217	-5,826	-4,836
16 Discrepancy	-74,191	-12,756	-641	-1,731
17 Total Final Energy Consumption	510,084	87,381	923	436,360
18 Industry Sector	424,511	82,372	191	95,373
19 Transport Sector	3,168	1	-	178,442
20 Other Sector	82,405	5,008	-	99,859
20.1 Residential & Commercial	60,372	4,445	-	52,577
20.2 Agriculture	9,664	391	-	15,717
20.3 Other	12,368	173	-	31,564
21 Non Energy	-	-	731	62,686

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
1,030	1,734	-	54	9,410	-	-	13,053
3,293	-	-	-	10	-	-	25,831
-	-	-	-	-	-	-	-874
-	-	-	-	-	-	-	-166
-	-	-	-	-	-	-	-712
-36	-	-	-	-52	-	-	80
4,286	1,734	-	54	9,367	-	-	37,213
-	-	-	-	-	-	-	39
-2,336	-1,718	-	-33	-170	5,502	-	-5,622
-74	-15	-	-2	-3,531	497	-	-3,738
19	-	-	-	-	-	-	4
-	-	-	-	-	-	-	-1,417
-	-	-	-	-	-	-	-267
-	-	-	-	-303	-	-	-304
-263	-	-	-	-	-698	-	-1,528
-192	-	-	-	0	50	-	573
1,441	-	-	18	5,363	5,351	-	24,954
625	-	-	2	1,682	3,625	-	9,069
29	-	-	-	-	41	-	7,461
532	-	-	17	3,681	1,685	-	7,685
532	-	-	17	3,681	1,673	-	7,393
-	-	-	-	-	-	-	-
0	-	-	-	-	11	-	292
255	-	-	-	-	-	-	738

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
99,759	75,001	25,381	8,254	4,025	-	-	2,289,163
39,430	-	-	-	-	591	-	507,042
-2,691	-	-	-	-	-1,518	-	-39,403
-	-	-	-	-	-	-	-1,497
-	-	-	-	-	-	-	-2,642
-	-	-	-	-	-	-	-84,307
136,498	75,001	25,381	8,254	4,025	-927	-	2,668,356
-	-	-	-	-	-	-	-
-19,942	-75,001	-25,381	-8,254	-4,016	386,368	44,575	-554,735
-4,583	-	-	-	-	42,561	36,404	-91,526
493	-	-	-	-	-	-	-4,255
-	-	-	-	-	-	-	35,818
-	-	-	-	-	-	-	-183,038
-	-	-	-	-	-	-	-52,696
-19,894	-	-	-	-	-73,499	-10,740	-176,534
-159	-	-	-	-9	-44	599	-88,932
92,414	-	-	-	-	354,460	70,837	1,552,458
37,799	-	-	-	-	243,330	48,465	932,042
13,260	-	-	-	-	7,872	-	202,742
34,849	-	-	-	-	103,257	22,372	347,750
31,729	-	-	-	-	68,030	19,686	236,838
60	-	-	-	-	8,708	27	34,567
3,061	-	-	-	-	26,519	2,660	76,345
6,506	-	-	-	-	-	-	69,923

Hong Kong, China, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	-	-	-	-
2 Import	7,779	-	-	17,851
3 Export	-0	-	-	-810
4 International Marine Bunkers	-	-	-	-8,448
5 International Aviation Bunkers	-	-	-	-5,589
6 Stock Change	-491	-	-	230
7 Total Primary Energy Supply	7,288	-	-	3,234
8 Transfers	-	-	-	-
9 Main Activity Producer	-7,288	-	-	-190
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	-333
12 Petroleum Refineries	-	-	-5	5
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	5	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	0	-	-	-298
17 Total Final Energy Consumption	0	-	-	2,418
18 Industry Sector	0	-	-	102
19 Transport Sector	-	-	-	2,110
20 Other Sector	-	-	-	206
20.1 Residential & Commercial	-	-	-	206
20.2 Agriculture	-	-	-	-
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	-

Indonesia, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	226,909	-	50,330	-
2 Import	46	-	14,672	31,182
3 Export	-178,782	-	-17,633	-310
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-
6 Stock Change	128	-	1,833	3,025
7 Total Primary Energy Supply	48,300	-	49,201	33,897
8 Transfers	-	-	-	-
9 Main Activity Producer	-31,056	-	-	-7,113
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-54,270	53,865
13 Coal Transformation	-21	17	-	-
14 Other Transformation	-	-	5,990	-3,608
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-0	-	-921	391
17 Total Final Energy Consumption	17,223	17	-	77,432
18 Industry Sector	17,223	17	-	17,576
19 Transport Sector	-	-	-	44,597
20 Other Sector	-	-	-	11,177
20.1 Residential & Commercial	-	-	-	7,666
20.2 Agriculture	-	-	-	-
20.3 Other	-	-	-	3,511
21 Non Energy	-	-	-	4,083

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	1	66	-	-	67
2,374	-	-	-	7	1,015	-	29,027
-	-	-	-	-3	-158	-	-971
-	-	-	-	-	-	-	-8,448
-	-	-	-	-	-	-	-5,589
-	-	-	-	-	-	-	-261
2,374	-	-	1	69	857	-	13,823
-	-	-	-	-	-	-	-
-1,697	-	-	-0	-	3,333	-	-5,842
-	-	-	-1	-13	4	4	-5
333	-	-	-	-	-	-	-0
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-23	-	-	-18
-333	-	-	-	-	-489	-	-823
-0	-	-	-0	0	0	-	-298
677	-	-	-	34	3,704	4	6,837
26	-	-	-	-	224	-	352
651	-	-	-	-	65	-	2,175
651	-	-	-	34	3,416	4	4,311
651	-	-	-	34	3,416	4	4,311
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
69,435	1,101	-	8,099	5,990	-	-	361,863
-	-	-	-	-	257	-	46,156
-31,676	-	-	-	-	-	-	-228,400
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	4,986
37,760	1,101	-	8,099	5,990	257	-	184,604
-	-	-	-	-	-	-	-
-10,511	-1,101	-	-8,099	-	16,861	-	-41,019
-	-	-	-	-	-	-	-
-3,727	-	-	-	-	-	-	-3,727
-	-	-	-	-	-	-	-405
-	-	-	-	-	-	-	-4
-	-	-	-	-5,990	-	-	-3,608
-5,771	-	-	-	-	-2,132	-	-7,902
-219	-	-	-	-	-23	-	-773
17,532	-	-	-	-	14,963	-	127,168
13,288	-	-	-	-	5,175	-	53,279
19	-	-	-	-	9	-	44,625
247	-	-	-	-	9,779	-	21,202
247	-	-	-	-	9,779	-	17,691
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3,511
3,979	-	-	-	-	-	-	8,062

Japan, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	675	-	689	-
2 Import	112,229	514	183,458	51,123
3 Export	-	-988	-	-12,822
4 International Marine Bunkers	-	-	-	-4,278
5 International Aviation Bunkers	-	-	-	-6,415
6 Stock Change	-562	-	128	154
7 Total Primary Energy Supply	112,341	-474	184,275	27,762
8 Transfers	-	-	-369	303
9 Main Activity Producer	-48,982	-3,985	-12,879	-21,178
10 Autoproducers	-10,938	-2,610	-	-11,412
11 Gas Processing	-	-	-	-1,325
12 Petroleum Refineries	-	-	-171,005	171,831
13 Coal Transformation	-35,887	33,378	-	-893
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-555	-2,991	-	-10,695
16 Discrepancy	-1,326	-4,663	-23	5,837
17 Total Final Energy Consumption	14,654	18,656	-	160,230
18 Industry Sector	14,654	18,061	-	50,061
19 Transport Sector	-	-	-	76,340
20 Other Sector	-	595	-	29,982
20.1 Residential & Commercial	-	595	-	25,136
20.2 Agriculture	-	-	-	3,328
20.3 Other	-	-	-	1,517
21 Non Energy	-	-	-	3,849

Republic of Korea, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	932	-	658	-
2 Import	75,318	253	131,062	37,435
3 Export	-	-	-356	-58,465
4 International Marine Bunkers	-	-	-	-8,524
5 International Aviation Bunkers	-	-	-	-4,050
6 Stock Change	59	-	-928	318
7 Total Primary Energy Supply	76,309	253	130,436	-33,285
8 Transfers	-	-	259	-733
9 Main Activity Producer	-47,148	-812	-	-3,759
10 Autoproducers	-3,114	-2,897	-	-2,061
11 Gas Processing	-	-	-	-725
12 Petroleum Refineries	-	-	-137,830	135,497
13 Coal Transformation	-22,377	10,905	-	-
14 Other Transformation	-	-	8,420	-7,836
15 Loss & Own Use	-	-2,897	-12	-4,960
16 Discrepancy	825	218	-1,273	2,595
17 Total Final Energy Consumption	4,495	4,769	-	84,734
18 Industry Sector	4,495	3,954	-	4,145
19 Transport Sector	-	-	-	28,935
20 Other Sector	-	816	-	8,695
20.1 Residential & Commercial	-	816	-	5,629
20.2 Agriculture	-	-	-	1,166
20.3 Other	-	-	-	1,900
21 Non Energy	-	-	-	42,959

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
2,767	6,865	4,689	3,931	5,527	-	-	25,142
102,497	-	-	-	-	-	-	449,822
-	-	-	-	-	-	-	-13,810
-	-	-	-	-	-	-	-4,278
-	-	-	-	-	-	-	-6,415
-16	-	-	-	-	-	-	-296
105,248	6,865	4,689	3,931	5,527	-	-	450,164
-	-	-	-	-	-	-	-66
-69,997	-6,174	-4,689	-2,326	-708	71,819	606	-98,492
-3,939	-691	-	-1,251	-7,793	23,822	177	-14,635
1,244	-	-	-	-	-	-	-81
-	-	-	-	-	-	-	826
-	-	-	-	-	-	-	-3,402
-	-	-	-	-	-	-	-
-4,954	-	-	-	-	-10,716	-	-29,911
3,240	0	-	0	4,408	-223	-73	7,178
30,841	-	-	355	1,434	84,702	710	311,582
16,104	-	-	-	1,412	34,246	-	134,538
93	-	-	-	-	1,737	-	78,169
14,644	-	-	355	22	48,719	710	95,026
14,644	-	-	355	22	48,410	634	89,796
-	-	-	-	-	309	76	3,713
-	-	-	-	-	-	-	1,517
-	-	-	-	-	-	-	3,849

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
391	341	39,175	265	4,277	-	-	46,040
42,853	-	-	-	-	-	-	286,922
-	-	-	-	-	-	-	-58,820
-	-	-	-	-	-	-	-8,524
-	-	-	-	-	-	-	-4,050
1,746	-	-	-	-	-	-	1,194
44,990	341	39,175	265	4,277	-	-	262,763
-	-	-	-	-	-	-	-474
-21,543	-341	-39,175	-156	-131	42,998	1,844	-68,223
-676	-	-	-18	-1,157	2,662	3,399	-3,861
563	-	-	-	-	-	-	-163
-	-	-	-	-	-	-	-2,332
-	-	-	-	-	-	-	-11,472
-	-	-	-	-303	-	-	281
-237	-	-	-	-	-4,598	-143	-12,847
-194	-	-	-0	48	339	-126	2,430
22,904	-	-	92	2,735	41,401	4,974	166,103
9,292	-	-	2	1,890	21,555	2,128	47,461
1,149	-	-	-	-	194	-	30,277
12,463	-	-	89	845	19,652	2,846	45,406
12,457	-	-	82	813	18,614	2,846	41,257
5	-	-	7	29	826	-	2,033
-	-	-	-	3	213	-	2,116
-	-	-	-	-	-	-	42,959

Malaysia, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	1,860	-	31,321	-
2 Import	14,220	-	10,003	12,725
3 Export	-232	-	-12,086	-13,967
4 International Marine Bunkers	-	-	-	-57
5 International Aviation Bunkers	-	-	-	-2,017
6 Stock Change	-52	-	967	282
7 Total Primary Energy Supply	15,796	-	30,204	-3,034
8 Transfers	-	-	-2,206	2,036
9 Main Activity Producer	-14,138	-	-	-1,361
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	715
12 Petroleum Refineries	-	-	-27,749	26,147
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	99	-
15 Loss & Own Use	-	-	-	-1,753
16 Discrepancy	86	-	-348	-34
17 Total Final Energy Consumption	1,744	-	-	22,716
18 Industry Sector	1,744	-	-	4,528
19 Transport Sector	-	-	-	14,835
20 Other Sector	-	-	-	2,614
20.1 Residential & Commercial	-	-	-	1,591
20.2 Agriculture	-	-	-	937
20.3 Other	-	-	-	86
21 Non Energy	-	-	-	739

Mexico, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	7,529	-	152,190	-
2 Import	4,128	248	485	32,388
3 Export	-151	-	-70,781	-7,384
4 International Marine Bunkers	-	-	-	-930
5 International Aviation Bunkers	-	-	-	-2,901
6 Stock Change	-2,322	32	-286	-775
7 Total Primary Energy Supply	9,183	279	81,608	20,398
8 Transfers	-	-	-7,590	8,775
9 Main Activity Producer	-8,070	-	-	-10,473
10 Autoproducers	-36	-87	-	-1,371
11 Gas Processing	-	-	-	-822
12 Petroleum Refineries	-	-	-70,990	67,206
13 Coal Transformation	-1,949	1,338	-	-
14 Other Transformation	-	-	225	-239
15 Loss & Own Use	-	-59	-	-5,364
16 Discrepancy	1,002	145	-3,253	-4,314
17 Total Final Energy Consumption	129	1,617	-	73,796
18 Industry Sector	129	1,617	-	5,912
19 Transport Sector	-	-	-	52,297
20 Other Sector	-	-	-	11,122
20.1 Residential & Commercial	-	-	-	8,068
20.2 Agriculture	-	-	-	3,053
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	4,464

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
51,157	796	-	4	745	-	-	85,883
7,819	-	-	-	-	9	-	44,775
-26,755	-	-	-	-25	-1	-	-53,067
-	-	-	-	-	-	-	-57
-	-	-	-	-	-	-	-2,017
-	-	-	-	-94	-	-	1,102
32,222	796	-	4	626	7	-	76,621
-	-	-	-	-	-	-	-170
-11,465	-796	-	-4	-346	11,025	-	-17,084
-1,723	-	-	-	-180	529	-	-1,375
-7,756	-	-	-	-	-	-	-7,041
-	-	-	-	-	-	-	-1,603
-	-	-	-	-	-	-	-
-	-	-	-	-99	-	-	-
-1,129	-	-	-	-	-995	-	-3,876
-2	-	-	-	-	-556	-	-853
10,147	-	-	-	-	10,011	-	44,619
4,530	-	-	-	-	4,509	-	15,310
291	-	-	-	-	21	-	15,146
23	-	-	-	-	5,481	-	8,119
23	-	-	-	-	5,451	-	7,066
-	-	-	-	-	30	-	967
-	-	-	-	-	-	-	86
5,304	-	-	-	-	-	-	6,043

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
40,357	2,740	2,285	5,475	8,423	-	-	218,999
18,615	-	-	-	-	201	-	56,065
-68	-	-	-	-	-566	-	-78,950
-	-	-	-	-	-	-	-930
-	-	-	-	-	-	-	-2,901
-417	-	-	-	-	-	-	-3,768
58,487	2,740	2,285	5,475	8,423	-365	-	188,514
-	-	-	-	-	-	-	1,186
-22,863	-2,693	-2,285	-5,153	-	22,506	-	-29,032
-3,415	-46	-	-169	-1,312	2,766	-	-3,670
569	-	-	-	-	-	-	-253
-	-	-	-	-	-	-	-3,784
-	-	-	-	-	-	-	-611
-	-	-	-	-	-	-	-14
-18,187	-	-	-	-	-5,377	-	-28,987
-147	-	-	-0	-0	233	-	-6,335
14,445	-	-	153	7,111	19,763	-	117,015
10,324	-	-	7	979	11,228	-	30,197
16	-	-	-	-	97	-	52,411
1,005	-	-	146	6,132	8,438	-	26,844
1,005	-	-	146	6,132	6,464	-	21,816
-	-	-	-	-	930	-	3,984
-	-	-	-	-	1,044	-	1,044
3,099	-	-	-	-	-	-	7,564

New Zealand, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	2,875	-	2,121	-
2 Import	83	-	5,618	1,792
3 Export	-1,576	-	-1,838	-288
4 International Marine Bunkers	-	-	-	-374
5 International Aviation Bunkers	-	-	-	-824
6 Stock Change	135	-	151	-5
7 Total Primary Energy Supply	1,517	-	6,052	300
8 Transfers	-	-	-181	189
9 Main Activity Producer	-665	-	-	-1
10 Autoproducers	-7	-172	-	-
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-5,799	5,816
13 Coal Transformation	-418	260	-	-
14 Other Transformation	-	-	6	-
15 Loss & Own Use	-	-50	-	-365
16 Discrepancy	102	0	-77	-160
17 Total Final Energy Consumption	529	38	-	5,778
18 Industry Sector	404	38	-	364
19 Transport Sector	-	-	-	4,537
20 Other Sector	125	-	-	627
20.1 Residential & Commercial	42	-	-	194
20.2 Agriculture	83	-	-	336
20.3 Other	-	-	-	97
21 Non Energy	-	-	-	250

Papua New Guinea, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	-	-	756	-
2 Import	-	-	1,111	921
3 Export	-	-	-755	-525
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-
6 Stock Change	-	-	-44	35
7 Total Primary Energy Supply	-	-	1,069	431
8 Transfers	-	-	-	0
9 Main Activity Producer	-	-	-	-99
10 Autoproducers	-	-	-	-500
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-1,063	1,051
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-	-	-6	0
17 Total Final Energy Consumption	-	-	-	884
18 Industry Sector	-	-	-	199
19 Transport Sector	-	-	-	517
20 Other Sector	-	-	-	167
20.1 Residential & Commercial	-	-	-	-
20.2 Agriculture	-	-	-	-
20.3 Other	-	-	-	167
21 Non Energy	-	-	-	-

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
3,799	1,969	-	3,976	1,202	-	-	15,942
-	-	-	-	2	-	-	7,495
-	-	-	-	-	-	-	-3,702
-	-	-	-	-	-	-	-374
-	-	-	-	-	-	-	-824
42	-	-	-	-	-	-	322
3,841	1,969	-	3,976	1,204	-	-	18,859
-	-	-	-	-	-	-	7
-1,531	-1,968	-	-3,697	-43	3,692	-	-4,213
-37	-1	-	-33	-116	117	26	-222
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	16
-0	-	-	-	-	-	-	-159
-	-	-	-	-6	-	-	-0
-222	-	-	-	-	-430	-26	-1,093
-121	-0	-	0	0	-57	-	-313
1,928	-	-	247	1,040	3,323	-	12,883
907	-	-	159	899	1,218	-	3,989
1	-	-	-	-	5	-	4,543
338	-	-	88	141	2,100	-	3,420
305	-	-	69	141	1,885	-	2,636
34	-	-	19	-	145	-	617
-	-	-	-	-	70	-	167
682	-	-	-	-	-	-	932

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
137	86	-	363	-	-	-	1,341
-	-	-	-	-	-	-	2,033
-	-	-	-	-	-	-	-1,280
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-9
137	86	-	363	-	-	-	2,085
-	-	-	-	-	-	-	0
-	-55	-	-	-	84	-	-70
-123	-31	-	-363	-	264	-	-752
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-12
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-6	-	-	-	-	-23	-	-29
-7	-	-	-	-	-0	-	-13
-	-	-	-	-	325	-	1,209
-	-	-	-	-	246	-	445
-	-	-	-	-	-	-	517
-	-	-	-	-	80	-	247
-	-	-	-	-	-	-	-
-	-	-	-	-	80	-	247
-	-	-	-	-	-	-	-

Peru, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	148	-	6,900	-
2 Import	455	1	4,582	2,750
3 Export	-89	-27	-788	-4,352
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-
6 Stock Change	333	26	180	1,059
7 Total Primary Energy Supply	847	0	10,874	-544
8 Transfers	-	-	-1,346	1,337
9 Main Activity Producer	-162	-	-	-211
10 Autoproducers	-145	-	-	-212
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-9,754	9,538
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	216	-
15 Loss & Own Use	-	-	-	-277
16 Discrepancy	33	0	9	-114
17 Total Final Energy Consumption	574	0	-	9,517
18 Industry Sector	572	0	-	1,284
19 Transport Sector	-	-	-	6,314
20 Other Sector	2	-	-	1,215
20.1 Residential & Commercial	-	-	-	1,036
20.2 Agriculture	2	-	-	42
20.3 Other	-	-	-	138
21 Non Energy	-	-	-	704

Philippines, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	3,879	-	220	-
2 Import	6,278	-	8,872	6,755
3 Export	-1,675	-	-141	-626
4 International Marine Bunkers	-	-	-	-181
5 International Aviation Bunkers	-	-	-	-1,082
6 Stock Change	834	-	82	-74
7 Total Primary Energy Supply	9,316	-	9,033	4,793
8 Transfers	-	-	-	-
9 Main Activity Producer	-6,300	-	-	-971
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-8,402	8,227
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	122	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-1,118	-	-754	-493
17 Total Final Energy Consumption	1,897	-	-	11,556
18 Industry Sector	1,784	-	-	1,275
19 Transport Sector	-	-	-	8,097
20 Other Sector	113	-	-	2,051
20.1 Residential & Commercial	-	-	-	1,868
20.2 Agriculture	-	-	-	28
20.3 Other	113	-	-	154
21 Non Energy	-	-	-	133

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
11,992	1,836	-	9	348	-	-	21,233
-	-	-	-	282	0	-	8,070
-5,167	-	-	-	-25	-	-	-10,447
-	-	-	-	-	-	-	-
-	-	-	-	-127	-	-	1,471
6,826	1,836	-	9	478	0	-	20,327
-	-	-	-	-	-	-	-10
-3,728	-1,794	-	-2	-74	3,212	-	-2,759
-201	-42	-	-	-119	220	-	-499
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-215
-	-	-	-	-	-	-	-
-	-	-	-	-282	-	-	-66
-1,269	-	-	-	-	-315	-	-1,861
-201	-	-	-0	-3	-1	-	-275
1,427	-	-	7	-	3,117	-	14,642
759	-	-	-	-	1,849	-	4,284
558	-	-	-	-	0	-	6,873
109	-	-	7	-	1,468	-	2,801
109	-	-	7	-	1,378	-	2,530
-	-	-	0	-	64	-	108
-	-	-	0	-	25	-	163
-	-	-	-	-	-	-	704

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
3,159	882	-	8,822	6,473	-	-	23,435
-	-	-	-	168	-	-	22,074
-	-	-	-	-	-	-	-2,442
-	-	-	-	-	-	-	-181
-	-	-	-	-	-	-	-1,082
-	-	-	-	22	-	-	865
3,159	882	-	8,822	6,664	-	-	42,668
-	-	-	-	-	-	-	-
-3,015	-882	-	-8,822	-89	6,271	-	-13,808
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-175
-	-	-	-	-	-	-	-
-	-	-	-	-1,619	-	-	-1,497
-135	-	-	-	-	-460	-	-596
-8	-	-	-	-0	-719	-	-3,092
1	-	-	-	4,956	5,092	-	23,502
-	-	-	-	1,060	1,726	-	5,845
1	-	-	-	-	10	-	8,108
-	-	-	-	3,896	3,356	-	9,416
-	-	-	-	3,893	3,223	-	8,984
-	-	-	-	0	117	-	146
-	-	-	-	3	16	-	286
-	-	-	-	-	-	-	133

Russia, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	200,719	-	521,255	-
2 Import	17,875	390	840	1,723
3 Export	-83,542	-1,632	-241,151	-105,551
4 International Marine Bunkers	-	-	-	-1,795
5 International Aviation Bunkers	-	-	-	-6,605
6 Stock Change	-382	-	475	-348
7 Total Primary Energy Supply	134,669	-1,242	281,420	-112,576
8 Transfers	-	-	-	-
9 Main Activity Producer	-52,553	-	-	-7,176
10 Autoproducers	-17,580	-2,822	-796	-8,659
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-275,606	258,009
13 Coal Transformation	-41,026	12,538	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-652	-991	-4,933	-12,200
16 Discrepancy	-17,094	5	0	-297
17 Total Final Energy Consumption	5,763	7,488	85	117,102
18 Industry Sector	1,594	7,488	33	11,259
19 Transport Sector	-	-	-	58,694
20 Other Sector	4,169	-	52	12,351
20.1 Residential & Commercial	4,110	-	-	8,462
20.2 Agriculture	58	-	10	3,078
20.3 Other	2	-	42	810
21 Non Energy	-	-	-	34,797

Singapore, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	-	-	-	-
2 Import	25	0	50,430	97,842
3 Export	-0	-0	-8	-84,303
4 International Marine Bunkers	-	-	-	-41,998
5 International Aviation Bunkers	-	-	-	-6,847
6 Stock Change	-	-	-	-
7 Total Primary Energy Supply	25	0	50,422	-35,306
8 Transfers	-	-	-	-
9 Main Activity Producer	-	-	-	-1,278
10 Autoproducers	-	-	-	-58
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-50,430	44,230
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-25	-0	8	-0
17 Total Final Energy Consumption	-	-	-	7,588
18 Industry Sector	-	-	-	6,043
19 Transport Sector	-	-	-	1,545
20 Other Sector	-	-	-	-
20.1 Residential & Commercial	-	-	-	-
20.2 Agriculture	-	-	-	-
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	-

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
540,793	14,267	46,290	411	7,699	-	-	1,331,435
6,606	-	-	-	2	229	-	27,665
-158,822	-	-	-	-307	-1,646	-	-592,651
-	-	-	-	-	-	-	-1,795
-	-	-	-	-	-	-	-6,695
-1,459	-	-	-	39	-	-	-1,675
387,119	14,267	46,290	411	7,434	-1,417	-	756,374
-	-	-	-	-	-	-	-
-153,018	-14,179	-46,290	-411	-	86,183	58,942	-128,502
-88,318	-88	-	-	-4,430	5,778	94,100	-22,815
-0	-	-	-	-	-	-	-0
-	-	-	-	-	-	-	-17,597
-	-	-	-	-	-	-	-28,488
-1,673	-	-	-	-	-	-	-1,673
-16,047	-	-	-	-206	-26,878	-29,305	-91,211
0	-	-	-	-146	-1	1	-17,532
128,064	-	-	-	2,653	63,665	123,738	448,556
34,076	-	-	-	404	29,120	47,459	131,434
27,020	-	-	-	-	7,916	-	93,630
35,267	-	-	-	2,248	26,629	76,279	156,995
34,660	-	-	-	2,097	25,290	71,138	145,758
606	-	-	-	151	1,314	5,132	10,349
1	-	-	-	0	25	8	889
31,700	-	-	-	-	-	-	66,497

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	886	-	-	886
9,158	-	-	-	-	-	-	157,455
-0	-	-	-	-	-	-	-84,311
-	-	-	-	-	-	-	-41,998
-	-	-	-	-	-	-	-6,847
9,157	-	-	-	886	-	-	25,184
-	-	-	-	-	-	-	-
-7,110	-	-	-	-602	3,887	-	-5,104
-375	-	-	-	-284	148	-	-568
-1	-	-	-	-	-	-	-1
-	-	-	-	-	-	-	-6,200
-	-	-	-	-	-	-	-
-	-	-	-	-	-374	-	-374
-415	-	-	-	-	0	-	-432
1,256	-	-	-	-	3,661	-	12,505
1,095	-	-	-	-	1,457	-	8,595
22	-	-	-	-	206	-	1,773
139	-	-	-	-	1,998	-	2,137
57	-	-	-	-	571	-	628
-	-	-	-	-	-	-	-
82	-	-	-	-	1,427	-	1,509
-	-	-	-	-	-	-	-

Chinese Taipei, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	-	-	10	-
2 Import	35,642	156	46,603	14,469
3 Export	-	-76	-	-16,366
4 International Marine Bunkers	-	-	-	-1,182
5 International Aviation Bunkers	-	-	-	-2,075
6 Stock Change	350	-	461	-181
7 Total Primary Energy Supply	35,993	81	47,074	-5,335
8 Transfers	-	-	-	-901
9 Main Activity Producer	-19,816	-	-	-1,380
10 Autoproducers	-5,091	-672	-	-843
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-47,354	47,476
13 Coal Transformation	-5,206	3,052	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-	-945	-	-1,642
16 Discrepancy	-577	104	280	-175
17 Total Final Energy Consumption	5,302	1,619	-	37,200
18 Industry Sector	5,302	1,619	-	2,856
19 Transport Sector	-	-	-	11,683
20 Other Sector	-	-	-	2,403
20.1 Residential & Commercial	-	-	-	2,064
20.2 Agriculture	-	-	-	3
20.3 Other	-	-	-	336
21 Non Energy	-	-	-	20,259

Thailand, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	4,798	-	17,497	-
2 Import	4,720	7,030	45,074	2,908
3 Export	-2	-5	-2,423	-13,808
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-3,937
6 Stock Change	-1,208	-766	201	318
7 Total Primary Energy Supply	8,308	6,259	60,349	-14,520
8 Transfers	-	-	-4,106	4,106
9 Main Activity Producer	-6,935	-957	-	-508
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-50,530	51,409
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	1,153	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-31	-1	-196	1
17 Total Final Energy Consumption	1,342	5,301	6,670	40,488
18 Industry Sector	1,342	5,301	-	3,841
19 Transport Sector	-	-	-	20,062
20 Other Sector	-	-	-	7,381
20.1 Residential & Commercial	-	-	-	3,590
20.2 Agriculture	-	-	-	3,791
20.3 Other	-	-	-	-
21 Non Energy	-	-	6,670	9,204

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
354	740	10,544	230	1,731	-	-	13,610
15,935	-	-	-	-	-	-	112,807
-	-	-	-	-	-	-	-16,442
-	-	-	-	-	-	-	-1,182
-	-	-	-	-	-	-	-2,075
108	-	-	-	-	-	-	739
16,397	740	10,544	230	1,731	-	-	107,457
-	-	-	-	-	-	-	-901
-11,542	-740	-10,544	-122	-	18,516	-	-25,629
-81	-	-	-5	-1,626	3,018	-	-5,300
-635	-	-	-	-	-	-	-635
-	-	-	-	-	-	-	122
-	-	-	-	-	-	-	-2,155
-	-	-	-	-	-	-	-
-712	-	-	-	-	-1,760	-	-5,059
-766	0	-	-0	-105	-636	-	-1,877
2,661	-	-	103	-	19,138	-	66,023
1,441	-	-	-	-	11,043	-	22,262
-	-	-	-	-	106	-	11,789
1,220	-	-	103	-	7,989	-	11,714
1,220	-	-	103	-	7,756	-	11,142
-	-	-	-	-	154	-	157
-	-	-	-	-	79	-	415
-	-	-	-	-	-	-	20,259

Unit: ktce							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
35,757	743	-	41	2,295	-	-	61,131
9,901	-	-	-	-	888	-	70,521
-	-	-	-	-	-164	-	-16,403
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-3,937
-	-	-	-	-	-	-	-1,455
45,658	743	-	41	2,295	724	-	109,857
-	-	-	-	-	-	-	-
-24,164	-743	-	-41	-	14,729	-	-18,619
-	-	-	-	-2,295	-	-	-2,295
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	879
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1,153
-14,791	-	-	-	-	-1,582	-	-16,372
-0	-	-	0	-	-0	-	-227
6,703	-	-	0	-	13,871	-	74,376
2,659	-	-	-	-	5,732	-	18,875
2,480	-	-	-	-	9	-	22,552
1	-	-	0	-	8,131	-	15,513
1	-	-	0	-	7,992	-	11,583
-	-	-	-	-	33	-	3,824
-	-	-	-	-	106	-	106
1,563	-	-	-	-	-	-	17,436

United States of America, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	495,485	-	407,505	-
2 Import	5,109	709	483,420	68,288
3 Export	-73,147	-609	-13,863	-134,714
4 International Marine Bunkers	-	-	-	-15,409
5 International Aviation Bunkers	-	-	-	-21,342
6 Stock Change	-2,390	87	-4,586	1,966
7 Total Primary Energy Supply	425,057	187	872,477	-101,211
8 Transfers	-	-	-48,613	50,653
9 Main Activity Producer	-379,729	-191	-	-5,085
10 Autoproducers	-2,440	-973	-	-697
11 Gas Processing	-1,969	-	-	-
12 Petroleum Refineries	-	-	-845,260	835,783
13 Coal Transformation	-14,258	5,304	-	-
14 Other Transformation	-	-	27,212	-
15 Loss & Own Use	-206	-1,674	-	-35,238
16 Discrepancy	-8,991	-0	-3,640	-306
17 Total Final Energy Consumption	17,464	2,653	2,175	743,899
18 Industry Sector	16,563	2,653	-	20,342
19 Transport Sector	-	-	-	579,191
20 Other Sector	902	-	-	55,708
20.1 Residential & Commercial	902	-	-	41,055
20.2 Agriculture	-	-	-	14,654
20.3 Other	-	-	-	-
21 Non Energy	-	-	2,175	88,658

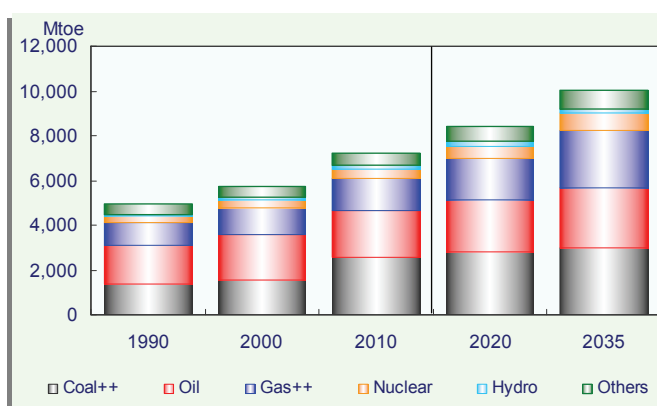
Viet Nam, 2012

	Coal	Coal Products	Crude Oil, NGL	Petroleum Products
1 Indigenous Production	23,734	-	17,518	-
2 Import	963	-	-	10,738
3 Export	-8,521	-	-9,643	-1,720
4 International Marine Bunkers	-	-	-	-
5 International Aviation Bunkers	-	-	-	-
6 Stock Change	-392	-	-1,340	91
7 Total Primary Energy Supply	15,785	-	6,534	9,109
8 Transfers	-	-	-	-
9 Main Activity Producer	-6,106	-	-	-126
10 Autoproducers	-	-	-	-
11 Gas Processing	-	-	-	-
12 Petroleum Refineries	-	-	-6,534	5,914
13 Coal Transformation	-	-	-	-
14 Other Transformation	-	-	-	-
15 Loss & Own Use	-	-	-	-
16 Discrepancy	-0	-	-	0
17 Total Final Energy Consumption	9,678	-	-	14,896
18 Industry Sector	8,299	-	-	1,611
19 Transport Sector	-	-	-	10,701
20 Other Sector	1,379	-	-	2,020
20.1 Residential & Commercial	1,361	-	-	1,549
20.2 Agriculture	18	-	-	471
20.3 Other	-	-	-	-
21 Non Energy	-	-	-	565

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
558,941	23,952	208,774	23,418	88,864	-	-	1,806,939
72,715	-	-	-	-	5,096	-	635,337
-37,093	-	-	-	-	-1,032	-	-260,456
-	-	-	-	-	-	-	-15,409
-	-	-	-	-	-	-	-21,342
1,141	-	-	-	-	-	-	-3,782
595,704	23,952	208,774	23,418	88,864	4,065	-	2,141,286
-	-	-	-	-	-	-	2,040
-211,211	-23,746	-208,774	-21,217	-14,248	352,324	11,961	-499,916
-16,196	-206	-	-498	-7,764	14,963	-	-13,811
1,163	-	-	-	-	-	-	-806
-	-	-	-	-	-	-	-9,477
-	-	-	-	-	-	-	-8,953
-	-	-	-	-27,205	-	-	7
-67,246	-	-	-	-	-50,843	-5,425	-160,632
-5,633	-0	-	0	0	-0	0	-18,571
296,580	-	-	1,703	39,647	320,508	6,536	1,431,166
101,926	-	-	106	27,122	72,748	5,165	246,625
17,610	-	-	-	-	588	-	597,390
163,491	-	-	1,597	12,524	247,171	1,372	482,765
162,301	-	-	1,597	12,115	232,066	1,372	451,406
1,191	-	-	-	409	2,646	-	18,899
-	-	-	-	-	12,459	-	12,459
13,552	-	-	-	-	-	-	104,385

Unit: ktoe							
Natural Gas. LNG	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
8,253	4,541	-	-	-	-	-	54,046
-	-	-	-	-	230	-	11,932
-	-	-	-	-	-105	-	-19,990
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-1,641
8,253	4,541	-	-	-	125	-	44,347
-	-	-	-	-	-	-	-
-6,815	-4,541	-	-	-	10,114	-	-7,475
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-620
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-1,173	-	-1,173
-0	-	-	-	-	-0	-	-0
1,438	-	-	-	-	9,065	-	35,078
1,438	-	-	-	-	4,758	-	16,106
-	-	-	-	-	-	-	10,701
-	-	-	-	-	4,307	-	7,707
-	-	-	-	-	4,179	-	7,089
-	-	-	-	-	128	-	617
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	565

Primary Energy Supply Outlook by Energy

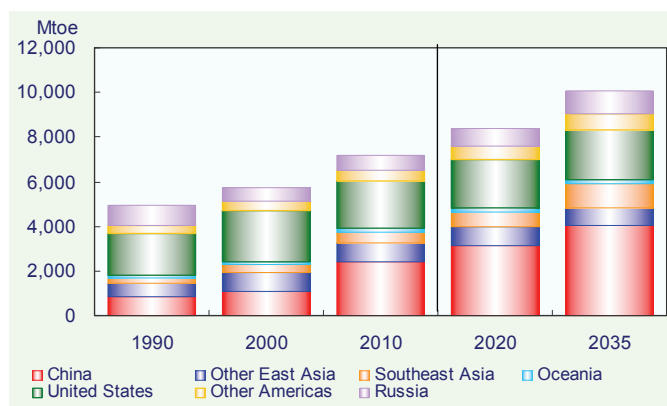


	1990	2000	2010	2020	Mtoe 2035
Coal++	1,377	1,574	2,571	2,800	2,988
Oil	1,754	2,006	2,113	2,363	2,678
Gas++	996	1,182	1,397	1,795	2,569
Nuclear	286	390	431	577	753
Hydro	92	107	158	210	232
Others	428	468	526	651	818
Total	4,932	5,727	7,198	8,400	10,043

	1990	2000	2010	2020	Share (%) 2035
Coal++	27.9	27.5	35.7	33.3	29.7
Oil	35.6	35.0	29.3	28.1	26.7
Gas++	20.2	20.6	19.4	21.4	25.6
Nuclear	5.8	6.8	6.0	6.9	7.5
Hydro	1.9	1.9	2.2	2.5	2.3
Others	8.7	8.2	7.3	7.7	8.1

By Asia Pacific Energy Research Centre, February 2013.

Primary Energy Supply Outlook by Region



	1990	2000	2010	2020	2035
China	863	1,095	2,397	3,142	4,027
Other East Asia	589	806	850	852	814
Southeast Asia	232	374	513	666	1,039
Oceania	100	126	146	164	181
United States	1,915	2,273	2,143	2,178	2,249
Other Americas	354	433	481	580	724
Russia	879	619	669	819	1,009
APEC 21	4,933	5,727	7,198	8,400	10,043

	1990	2000	2010	2020	2035
China	17.5	19.1	33.3	37.4	40.1
Other East Asia	11.9	14.1	11.8	10.1	8.1
Southeast Asia	4.7	6.5	7.1	7.9	10.3
Oceania	2.0	2.2	2.0	1.9	1.8
United States	38.8	39.7	29.8	25.9	22.4
Other Americas	7.2	7.6	6.7	6.9	7.2
Russia	17.8	10.8	9.3	9.7	10.0

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.

Selected Energy Indicators APEC Region

	Population			Real GDP			Real GDP	
	Millions			Billions of 2010 Price and 2010 USD			Billions of 2010 Price and 2010 PPP	
	1990	2000	2012	1990	2000	2012	1990	2000
APEC 21	2,284	2,553	2,787	19,702	26,697	38,399	22,416	31,232
East Asia and Russia	1,328	1,465	1,559	6,048	8,451	14,404	6,258	10,181
China	1,135	1,263	1,351	847	2,189	6,978	1,730	4,470
Hong Kong, China	5.7	6.7	7.2	104.1	153.4	243.3	151.0	222.4
Japan	123.5	126.9	127.6	4,552.9	5,093.0	5,549.7	3,581.3	4,006.1
Republic of Korea	42.9	47.0	50.0	377.1	710.0	1,160.8	517.9	975.2
Russia	148.3	146.6	143.2	1,413.9	951.6	1,644.6	2,711.9	1,825.1
Chinese Taipei	20.4	22.3	23.3	166.9	305.5	471.8	277.6	508.1
Southeast Asia	318.7	376.7	445.3	666.8	1,063.0	1,911.9	1,653	2,595
Brunei Darussalam	0.3	0.3	0.4	8.7	10.8	12.9	19.4	24.2
Indonesia	178.6	208.9	246.9	281.7	425.8	802.5	752.5	1,137.7
Malaysia	18.2	23.4	29.2	79.4	157.8	274.9	181.4	360.3
Philippines	61.9	77.7	96.7	94.5	125.3	220.9	243.6	323.1
Singapore	3.0	4.0	5.3	67.6	134.5	257.0	102.2	203.4
Thailand	56.6	62.3	66.8	135.0	208.7	343.6	353.4	546.5
Viet Nam	66.0	77.6	88.8	29.5	61.1	129.6	97.2	201.7
Oceania	24.6	28.4	34.3	723.6	1,000.0	1,421.1	543.8	751.2
Australia	17.1	19.2	22.7	636.2	881.6	1,259.7	460.5	638.1
New Zealand	3.3	3.9	4.4	83.1	111.8	150.3	76.7	103.3
Papua New Guinea	4.2	5.4	7.2	4.4	6.5	11.2	6.6	9.8
North America	277.4	312.9	348.6	10,062	14,054	17,341	9,903	13,843
Canada	27.8	30.8	34.8	1,008.2	1,336.6	1,683.2	849.0	1,125.6
United States of America	249.6	282.2	313.9	9,054	12,717	15,658	9,054	12,717
Latin America	121.1	145.3	168.3	758.1	1,116.2	1,547.4	1,250.4	1,834.4
Chile	13.2	15.5	17.5	80.2	149.2	242.7	115.3	214.4
Mexico	86.1	103.9	120.8	619.5	880.9	1,137.2	1,023.2	1,454.9
Peru	21.8	26.0	30.0	58.4	86.2	167.5	111.8	165.1

	Energy Indigenous Production			Net Import			Total Primary Energy Supply		
	Mtoe			Mtoe			Mtoe		
2012	1990	2000	2012	1990	2000	2012	1990	2000	2012
50,277	4,634	4,876	7,121	149.2	625.5	646.6	4,631	5,436	7,527
21,346	814	1,016	2,374	461.3	713.2	1,256.2	1,238	1,701	3,503
14,249	705.8	865.5	2,289.2	-30.5	32.4	467.6	654.0	905.2	2,668.4
352.7	0.0	0.0	0.1	10.8	18.2	28.1	10.6	15.1	13.8
4,365.4	74.7	105.0	25.1	371.4	420.4	436.0	434.6	513.6	450.2
1,594.3	22.6	34.4	46.0	70.1	165.7	228.1	93.1	188.2	262.8
3,154.3	1,292.8	977.8	1,331.4	-412.6	-349.6	-565.0	878.9	619.0	756.4
784.7	10.7	11.5	13.6	39.4	76.4	96.4	45.5	79.0	107.5
4,659	210.9	325.1	547.2	-52.4	-29.9	-60.1	142.0	267.6	436.4
29.0	15.9	17.3	20.0	-13.7	-15.2	-16.5	2.1	2.1	3.4
2,143.9	119.4	184.0	355.9	-65.9	-82.4	-182.2	53.3	101.2	178.6
627.9	46.4	75.6	85.9	-25.8	-27.3	-8.3	20.4	47.7	76.6
569.5	17.2	19.6	23.4	11.9	20.0	19.6	28.3	39.0	42.7
388.7	0.0	0.1	0.9	22.9	40.3	73.1	9.9	17.2	25.2
899.7	11.9	28.6	61.1	18.2	34.6	54.1	27.9	60.4	109.9
427.7	5.8	25.8	54.0	-0.2	-9.8	-8.1	5.4	14.8	44.3
1,067.3	173.5	251.6	334.7	-66.1	-126.5	-182.3	99.8	126.2	149.2
911.8	157.5	233.6	317.4	-64.5	-127.1	-186.8	86.2	108.1	128.3
138.8	11.4	14.2	15.9	2.1	3.4	3.8	12.7	17.0	18.9
16.7	4.6	3.9	1.3	-3.7	-2.7	0.8	0.9	1.1	2.1
17,075	1,926	2,041	2,227	282.6	478.7	206.1	2,123	2,526	2,392
1,417.5	273.4	373.5	419.7	-59.3	-127.7	-168.7	208.2	252.2	251.1
15,658	1,652.7	1,667.5	1,806.9	341.9	606.4	374.9	1,915.2	2,273.6	2,141.3
2,548.0	210.8	238.5	253.3	-63.4	-50.6	-0.3	144.0	181.1	246.1
348.8	7.9	8.6	13.1	7.0	17.7	25.0	14.0	25.2	37.2
1,878.2	194.7	222.1	219.0	-69.9	-71.6	-22.9	122.5	144.9	188.5
320.9	8.2	7.8	21.2	-0.6	3.3	-2.4	7.5	11.0	20.3

Note: * excluding Viet Nam.

	Total Final Energy Consumption			Final Consumption of Electricity			Total Primary Energy Supply	
	Mtoe			TWh			toe / Person	
	1990	2000	2012	1990	2000	2012	1990	2000
APEC 21	3,237	3,724	4,758	5,840	7,841	12,065	2.03	2.13
East Asia and Russia	896.6	1,188.6	2,103.0	1,543.4	2,477.4	5,853.5	0.93	1.16
China	489.9	634.7	1,552.5	606.4	1,053.7	4,121.6	0.58	0.72
Hong Kong, China	6.7	11.2	6.8	23.8	36.3	43.1	1.87	2.26
Japan	305.8	362.1	311.6	744.8	964.1	984.9	3.52	4.05
Republic of Korea	64.9	127.1	166.1	94.4	263.1	481.4	2.17	4.00
Russia	625.0	417.9	448.6	826.6	608.5	740.3	5.93	4.22
Chinese Taipei	29.3	53.6	66.0	74.0	160.1	222.5	2.23	3.55
Southeast Asia	92.5	162.6	283.1	125.2	326.2	556.7	0.45	0.71
Brunei Darussalam	0.4	0.7	1.0	1.0	2.5	3.2	8.36	6.30
Indonesia	34.0	63.6	127.2	30.5	108.9	174.0	0.30	0.48
Malaysia	13.1	29.7	44.6	19.9	61.2	116.4	1.12	2.04
Philippines	19.5	23.5	23.5	21.2	36.6	59.2	0.46	0.50
Singapore	5.3	6.4	12.5	14.2	29.1	42.6	3.25	4.28
Thailand	20.2	38.7	74.4	38.3	87.9	161.3	0.49	0.97
Viet Nam	4.2	11.9	35.1	6.2	22.4	105.4	0.08	0.19
Oceania	66.8	83.4	92.9	159.1	209.3	251.8	4.06	4.45
Australia	56.5	69.6	78.8	129.2	172.7	209.3	5.05	5.64
New Zealand	9.7	12.9	12.9	28.2	34.3	38.6	3.82	4.40
Papua New Guinea	0.6	0.9	1.2	1.7	2.3	3.8	0.21	0.21
North America	1,450.4	1,732.2	1,638.6	3,051.6	3,981.0	4,228.8	7.65	8.07
Canada	158.8	188.7	207.4	418.0	481.5	501.9	7.49	8.20
United States of America	1,291.6	1,543.5	1,431.2	2,633.6	3,499.5	3,726.8	7.67	8.06
Latin America	101.6	127.9	156.6	127.5	216.3	328.3	1.19	1.25
Chile	11.1	20.4	25.0	15.5	36.8	62.2	1.06	1.63
Mexico	84.3	98.3	117.0	100.2	162.2	229.8	1.42	1.40
Peru	6.2	9.2	14.6	11.8	17.3	36.2	0.35	0.42

	Total Primary Energy Supply per Real GDP			Total Primary Energy Supply per Real GDP			Total Final Energy Consumption per Capita			
	toe / Million 2010 USD			toe / Million 2010 PPP			toe / Person			
2012	1990	2000	2012	1990	2000	2012	1990	2000	2012	
2.70	235.1	203.6	196.0	206.6	174.0	147.6	1.42	1.46	1.71	
2.25	204.7	201.3	243.2	190.5	159.3	159.1	0.68	0.81	1.35	
1.98	771.9	413.5	382.4	378.0	202.5	187.3	0.43	0.50	1.15	CHN
1.93	102.2	98.4	56.8	70.5	67.9	39.2	1.17	1.68	0.96	HKG
3.53	95.5	100.8	81.1	121.4	128.2	103.1	2.48	2.85	2.44	JPN
5.25	246.9	265.0	226.4	179.8	193.0	164.8	1.51	2.70	3.32	KOR
5.28	621.6	650.5	459.9	324.1	339.2	239.8	4.21	2.85	3.13	RUS
4.61	272.5	258.5	227.7	163.8	155.5	136.9	1.44	2.40	2.83	TWN
0.98	212.9	251.8	228.2	85.9	103.1	93.7	0.29	0.43	0.64	
8.26	248.0	193.5	263.7	110.6	86.2	117.6	1.64	2.24	2.35	BRN
0.72	189.1	237.7	222.6	70.8	89.0	83.3	0.19	0.30	0.52	IDN
2.62	257.4	302.5	278.7	112.7	132.4	122.0	0.72	1.27	1.53	MYS
0.44	299.5	310.9	193.1	116.2	120.6	74.9	0.31	0.30	0.24	PHL
4.74	146.4	128.2	98.0	96.8	84.7	64.8	1.75	1.59	2.35	SGP
1.64	206.8	289.2	319.7	79.0	110.5	122.1	0.36	0.62	1.11	THA
0.50	183.8	242.7	342.1	55.7	73.6	103.7	0.06	0.15	0.40	VNM
4.35	137.9	126.2	105.0	183.5	168.0	139.8	2.72	2.94	2.71	
5.65	135.5	122.6	101.8	187.2	169.4	140.7	3.31	3.63	3.47	AUS
4.25	153.0	151.7	125.5	165.7	164.3	135.9	2.92	3.35	2.91	NZL
0.29	197.8	171.7	186.8	131.9	114.5	124.5	0.15	0.16	0.17	PNG
6.86	211.0	179.7	138.0	214.4	182.5	140.1	5.23	5.54	4.70	
7.23	206.5	188.7	149.2	245.2	224.1	177.2	5.71	6.13	5.97	CAN
6.82	211.5	178.8	136.8	211.5	178.8	136.8	5.17	5.47	4.56	USA
1.46	190.0	162.3	159.0	115.2	98.7	96.6	0.84	0.88	0.93	
2.13	174.6	168.7	153.4	121.5	117.4	106.7	0.84	1.32	1.43	CHL
1.56	197.7	164.5	165.8	119.7	99.6	100.4	0.98	0.95	0.97	MEX
0.68	129.1	128.2	121.3	67.4	66.9	63.3	0.29	0.35	0.49	PER

	Energy Related CO ₂ Emission			CO ₂ Emission per Capita		
	Mt-C			t-C / Person		
	1990	2000	2012	1990	2000	2012
APEC 20	3,399.3	3,912.8	5,443.5	1.488	1.533	1.953
East Asia and Russia	971.2	1,344.9	2,786.0	0.732	0.918	1.787
China	581.5	847.6	2,222.4	0.512	0.671	1.645
Hong Kong, China	8.9	8.5	11.8	1.565	1.278	1.649
Japan	288.6	317.5	330.5	2.336	2.502	2.591
Republic of Korea	62.4	113.1	151.7	1.455	2.406	3.034
Russia	619.2	361.3	399.2	4.176	2.465	2.788
Chinese Taipei	29.9	58.2	69.5	1.464	2.614	2.982
Southeast Asia	91.7	175.2	296.3	0.288	0.465	0.665
Brunei Darussalam	1.5	1.8	2.2	5.805	5.507	5.451
Indonesia	37.3	73.0	140.2	0.209	0.349	0.568
Malaysia	16.0	32.7	54.2	0.880	1.395	1.854
Philippines	9.8	17.5	21.1	0.158	0.225	0.218
Singapore	5.3	9.1	13.1	1.751	2.248	2.463
Thailand	21.8	41.1	65.4	0.385	0.659	0.979
Viet Nam	4.7	12.0	34.8	0.071	0.155	0.392
Oceania	75.2	95.4	110.7	3.065	3.361	3.225
Australia	68.4	86.6	100.8	4.009	4.524	4.435
New Zealand	6.2	7.9	8.6	1.864	2.057	1.936
Papua New Guinea	0.6	0.8	1.3	0.152	0.155	0.187
North America	1,553.0	1,808.9	1,663.4	5.598	5.780	4.771
Canada	114.3	140.9	141.4	4.112	4.579	4.069
United States of America	1,438.7	1,668.0	1,521.9	5.763	5.911	4.849
Latin America	84.2	115.1	153.2	0.696	0.792	0.910
Chile	8.0	13.3	21.9	0.606	0.860	1.254
Mexico	70.8	94.4	118.3	0.823	0.908	0.979
Peru	5.4	7.5	13.0	0.248	0.287	0.432

CO ₂ Emission per Real GDP			CO ₂ Emission per Real GDP			CO ₂ Emission per Total Primary Energy Supply			
kt-C / Billions of 2010 USD			kt-C / Billions of 2010 PPP			t-C / toe			
1990	2000	2012	1990	2000	2012	1990	2000	2012	
172.5	146.6	141.8	151.6	125.3	108.3	0.734	0.720	0.723	
160.6	159.1	193.4	155.2	132.1	130.5	0.785	0.791	0.795	
686.3	387.2	318.5	336.1	189.6	156.0	0.889	0.936	0.833	CHN
85.8	55.5	48.5	59.2	38.3	33.5	0.839	0.564	0.854	HKG
63.4	62.3	59.6	80.6	79.2	75.7	0.664	0.618	0.734	JPN
165.4	159.3	130.7	120.4	116.0	95.2	0.670	0.601	0.577	KOR
437.9	379.7	242.8	228.3	198.0	126.6	0.705	0.584	0.528	RUS
179.0	190.6	147.3	107.6	114.6	88.6	0.657	0.737	0.647	TWN
137.6	164.8	155.0	55.5	67.5	63.6	0.646	0.654	0.679	
172.3	169.1	174.0	76.8	75.4	77.6	0.695	0.874	0.660	BRN
132.4	171.4	174.8	49.6	64.2	65.4	0.700	0.721	0.785	IDN
201.9	207.2	197.2	88.4	90.7	86.3	0.784	0.685	0.707	MYS
103.7	139.4	95.5	40.2	54.1	37.1	0.346	0.448	0.495	PHL
79.0	67.3	50.9	52.2	44.5	33.7	0.539	0.525	0.520	SGP
161.2	196.9	190.3	61.6	75.2	72.7	0.780	0.681	0.595	THA
158.2	196.6	268.3	47.9	59.6	81.3	0.861	0.810	0.784	VNM
104.0	95.4	77.9	138.4	127.0	103.7	0.754	0.756	0.742	
107.5	98.3	80.0	148.6	135.8	110.5	0.794	0.801	0.786	AUS
74.7	70.9	57.1	80.9	76.8	61.8	0.489	0.468	0.455	NZL
144.2	127.4	119.9	96.1	84.9	79.9	0.729	0.742	0.642	PNG
154.3	128.7	95.9	156.8	130.7	97.4	0.731	0.716	0.695	
113.3	105.4	84.0	134.6	125.2	99.8	0.549	0.559	0.563	CAN
158.9	131.2	97.2	158.9	131.2	97.2	0.751	0.734	0.711	USA
111.1	103.1	99.0	67.4	62.7	60.1	0.585	0.635	0.622	
99.8	89.1	90.2	69.4	62.0	62.8	0.572	0.528	0.588	CHL
114.3	107.1	104.0	69.2	64.9	63.0	0.578	0.651	0.628	MEX
92.7	86.5	77.3	48.4	45.2	40.4	0.718	0.675	0.637	PER

Glossary

General note

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

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, blast furnace gas and gas works 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(including AVGAS), jet fuel, 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. Motor gasoline is distilled between 35 °C and 215 °C and treated by reforming, catalytic cracking or blending with aromatic fraction to reach a sufficiently high octane number (≥80 RON).

Naphtha

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

Jet Fuel

Jet fuel comprises both gasoline and kerosene type jet fuels meeting

specifications for use in aviation turbine power units.

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

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

Kerosene

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

Diesel Oil

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

Fuel Oil

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

LPG

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

Others

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

Gas++

Defined as natural gas and LNG.

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.

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, biomass, etc. However, for Indonesia, Peru, Chinese Taipei, Thailand and Vietnam, non-commercial biomass was not included to keep historical consistency. 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 and aviation bunkers plus or minus stock change.

Refining

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

Power Generation

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

Total Final Energy Consumption

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

Industry

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

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

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

Transport

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

- Domestic Air transport
- 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 are included.

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