



Asia-Pacific  
Economic Cooperation

# APEC

## ENERGY STATISTICS 2007

ENERGY WORKING GROUP  
DECEMBER 2009

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

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## PREFACE

The APEC Energy Statistics 2007 consists of the following chapters:

1. Explanation of the APEC Energy Statistics
2. Overview of the APEC Energy Situation
3. Member Tables

The statistics cover the 21 APEC member economies, i.e. Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; the Republic of the Philippines; the Russian Federation; Singapore; Chinese Taipei; Thailand; the United States of America and Viet Nam.

Chapter 1 describes the methodology for collecting and standardizing the energy data and for producing the secondary data such as the energy balances and other tables. The preparation of socio-economic data is also explained.

Chapter 2 provides an analysis of energy demand and supply in the APEC region and contains figures and tables showing trends of energy demand and supply.

Chapter 3 consists of annual and quarterly tables by member economies. The annual tables contain Energy Balance Tables for 2007 and 2006 and Energy Prices for 2007. The annual tables also include Major Energy Indicators such as primary energy supply, final energy consumption, demand and supply by energy sources and electricity as well as Major Economic Indicators such as population, GDP, balance of payments, foreign exchange rate, purchasing power parity, price indices and so on. These tables cover the data from 1980 to 2007 except Russia and Viet Nam which do not have data from the '80s to the early 90's. The objective is to report the most recently updated data.

APEC Energy Statistics 2007 is 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 is prepared in close cooperation with member economies.

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# 1 Background Information on the APEC

## Energy Statistics

The APEC Energy Statistics consist of energy data submitted by each member economy as well as social and economic data collected by EDMC (The Energy Data and Modelling Center), which is the Coordinating Agency (hereinafter referred to as C.A.) for this APEC activity. The energy balance tables, which give a detailed description of all energy products and flows, and other tables (primary energy supply, final energy consumption, etc.) included in the statistics, are secondary data compiled by EDMC.

## 1.1 Energy Data

### 1.1.1 Original Data

The APEC member economies regularly submit energy demand and supply data to EDMC. These data are defined as “original data”. Details for collection of the data are given below:

#### a. Collection Format for Original Energy Data

Most of the items found in the Energy Statistics are based on data submitted by the APEC member economies using a set of questionnaires for Oil, Coal, Natural Gas, Electricity and Heat, as well as New and Renewable Energy (NRE) that was developed in 2005 for the collection of annual data for the year 2004. These questionnaires are simplified forms of the annual energy questionnaires of the International Energy Agency (IEA) in view of the harmonization efforts of the C.A. with the IEA. Table 1-1a and 1-1b show the energy product and flows that are to be reported in the questionnaires. The definition of energy products and flows can be found in the Appendices.

Using the reporting format or the APEC Annual Energy Questionnaires, the members submitted the following information:

- Supply and demand information for specific type of energy products
- Power generating capacity by type of power plants
- Supply and demand information for NRE

The data are reported in the following required units:

Coal, Liquid and Solid Coal Products	1,000 Metric Tons
Gaseous Coal Products	10 <sup>10</sup> kcal (gross)
Oil and Oil Products	1,000 Metric Tons
Natural Gas	Million Cubic Meters
LNG	1,000 Metric Tons
Solid and Liquid Bio-fuels	1,000 Metric Tons
Biogas	10 <sup>10</sup> kcal (gross)
Electricity (including renewable)	GWh
Heat	10 <sup>10</sup> kcal (gross)

With regard to calorific values (both gross and net), the required units are the following:

Coal, Oil, NRE	kcal/kg
Natural Gas	kcal/cubic meter

Power Generating Capacity data are reported in MW.

For OECD member countries that also submit annual energy supply and demand data to IEA, C.A. accepts data submission using the IEA format. The C.A. developed computer programs to transfer data from the IEA format to APEC format and to generate energy balance tables from the APEC questionnaires.



Table 1-1a: Energy Products in the APEC Energy Database

<b>Coal</b> Coking Coal Other bituminous coal Sub-bituminous Coal Anthracite Lignite Peat <b>Coal Products</b> Coke Oven Coke Coke Oven Gas Blast furnace Gas Oxygen Steel furnace Gas Patent Fuel Coal Tar BKB/PB Gas Works Gas <b>Crude Oil &amp; NGL</b> Crude Oil Natural Gas Liquids Refinery Feedstocks Additives / Oxygenates Other Hydrocarbons <b>Gas</b> Natural Gas LNG	<b>Crude Oil &amp; NGL</b> Crude Oil Natural Gas Liquids Refinery Feedstocks Additives / Oxygenates Other Hydrocarbons <b>Petroleum Products</b> Gasoline Motor Gasoline Aviation Gasoline Naphtha Jet Fuel Gasoline Type Jet Fuel Kerosene Type Jet Fuel Kerosene Gas/Diesel Oil Fuel Oil LPG Refinery Gas (not liq.) Ethane White Spirit SBP Lubricants Bitumen Paraffin Waxes Petroleum Coke Other Products	<b>Hydro</b> <b>Nuclear</b> <b>New and Renewable Energy</b> Geothermal Photovoltaic Tide, Wave and Ocean Wind Geothermal Heat Solar Heat Fuel Wood and Woodwaste Bagasse Charcoal Other Biomass Biogas Industrial Waste Municipal Solid Waste Liquid Bio-fuels <b>Electricity</b> <b>Heat</b>
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## b. Collection Schedule and Actual Dates of Submission

The C.A. set the deadline for submission to end of November 2008. In principle, all twenty-one APEC members are expected to submit annual data to the C.A. on the aforementioned deadline. New Zealand; Chinese Taipei and Malaysia were able to submit the 5 energy questionnaires by the deadline while Indonesia was able

to submit only 4 of the 5 questionnaires. Japan and China submitted the 5 questionnaires before the end of December 2008. The remaining non-OECD APEC economies submitted after December 2008 except for Papua New Guinea and Singapore. Most of the energy data of these two economies were estimated by the C.A.

Table 1-1b: Energy Flows in the APEC Energy Database

<b>Indigenous Production</b>	<b>Total Transformation Sector</b>	<b>Total Final Energy Consumptions</b>
<b>Imports</b>	<b>Main Activity Producer</b>	<b>Industry Sector</b>
<b>Exports</b>	Electricity Plants	Iron and Steel
<b>International Marine Bunkers</b>	CHP Plants	Chemical (incl. Petro-Chemical)
<b>Stock Changes</b>	Heat Plants	Non Ferrous Metals
<b>Total Primary Energy Supply</b>	<b>Autoproducers</b>	Non Metallic Mineral Products
<b>Transfers</b>	Electricity Plants	Transportation Equipment
Recycled Products	CHP Plants	Machinery
Inter-product Transfers	Heat Plants	Mining and Quarrying
Products Transferred	<b>Gas Processing</b>	Food, Beverages and Tobacco
Gas Separation	Gas Works	Pulp, Paper and Printing
	Liquefaction	Wood and Wood Products
	Re-gasification	Construction
	Natural Gas Blending Plants	Textiles and Leather
	Gas to Liquid	Non-specified Industry
	<b>Refineries</b>	<b>Transport Sector</b>
	<b>Coal Transformation</b>	International Civil Aviation
	Coke Ovens	Domestic Air Transport
	Blast Furnaces	Road
	Patent Fuel Plants	Rail
	BKB/PB Plants	Inland Waterways
	Liquefaction (Coal to Oil)	Pipeline Transport
	<b>Petrochemical Industry</b>	Non-specified Transport
	<b>Biofuel Processing</b>	<b>Other Sector</b>
	<b>Charcoal Processing</b>	Commerce and Public Services
	<b>Non-specified Transformation</b>	Residential
	<b>Losses &amp; Own Use</b>	Agriculture
	<b>Own Use</b>	Fishing
	<b>Distribution Losses</b>	Non-specified Others
	<b>Discrepancy</b>	<b>of which Non-Energy Use</b>
		Transformation Sector
		Industry Sector
		Transport Sector
		Other Sector

### c. Collection Status

As of June 30, 2009, only 16 APEC economies have submitted data to the C.A., one economy short of the 17 that submitted last year. Two submitted data in July. Brunei Darussalam and Viet Nam submitted their energy balance tables for 2006. There was no submission from Peru. Fortunately, the CA was able to download their energy data from the Peru Ministry of Mines and Energy website. Of the remaining two economies, Papua New Guinea submitted crude oil and natural gas production, exports as well as refinery input and output data while Singapore did not submit any data at all.

The C.A. took measures to be able to generate energy balance tables for Papua New Guinea and Singapore. For the former, the C.A. estimated the final energy consumption as well as electricity generation and inputs as well as imports of petroleum products. For Singapore, the C.A. has to rely on the electricity and gas data downloaded from the website of the Energy Market Authority and the international marine bunker sales from Singapore Ports Authority website. Oil data are also calculated based on the oil trade data submitted by Singapore to the Joint Oil Data Initiative (JODI). The C.A. will highly appreciate if Singapore does the estimation of the data and submit the same to C.A. in the future.

### d. Use of the Internet

The advances in internet technology had enabled the submission of all energy data as email attachment. Correspondence for the improvement of data consistency and accuracy had also been carried out mostly through the internet.

## 1.2 Standardization

The APEC reporting format requires the use of certain units for reporting energy data. In this regard, the level of standardization has been improved by at least one notch. For example, all oil data are now reported in 1,000 metric tons unit. Before the 2004 data, each economy uses its own units such as barrels, kiloliters, cubic meters, etc. The C.A. however, does not standardize the conversion factor from physical to thermal units in view of the peculiarities in the thermal quantity of each energy product from the different economies. In this regard, the C.A. makes use of the calorific value data reported by each economy as opposed to using typical conversion factors.

### 1.2.1 Conversion Factors for Fossil Energy from Physical to Thermal Units

Between the two calorific values, namely gross and net calorific values, the APEC Standard adopted the net calorific value at the Third Experts Meeting (Singapore) to facilitate comparisons with international energy statistics such those of the IEA and UNSD. Therefore, gross calorific values used by some members must be converted to net calorific values. If only the gross calorific values are reported, the C.A. converts them to net calorific values by:

Coal / Oil	multiply the value by 95%
Gas	multiply the value by 90%

### 1.2.2 Conversion Factors for Primary Electricity

Table 1-2 shows the efficiency applied to convert primary electricity, i.e. power generated by processes which excludes fossil fuel, such as hydro, nuclear, geothermal and other power generation to primary

energy units. To allow comparisons of primary energy supplies, in the light of differences in conversion coefficients, standardization is required. APEC adopted the following conversion coefficients for compatibility with IEA and UN statistics.

Table 1-2: Efficiency of Primary Electricity

Primary Electricity	Efficiency
Hydro Power	100%
Nuclear Power	33%
Geothermal Power	10%
Other New Power	100%

The original energy data contained in these statistics have been processed using the adjustments mentioned above.

### 1.3 Secondary Data

Using the original data submitted by each member, C.A. prepares the following tables through the standardization process described in 1.2.

- (1) Energy Balance Table
- (2) Primary Energy Supply Table
- (3) Final Energy Consumption Table
- (4) Supply and Demand by Energy Source Table
- (5) Electricity Table
- (6) Stock Change Table

The Energy Balance Tables give a detailed description of energy sources and their flows.

APEC Energy Statistics contain the six tables mentioned above. Tables (2) through (6) are collectively referred to as “other tables”, and are compiled from data obtained from the original data tables after adjustment and the energy balance tables. Tables 2 through 6 allow comparisons among member economies.

#### 1.3.1 Energy Balance Table

The energy balance table is, in principle, the same as that of the IEA but with some adjustments. The different values could be attributed to the following:

- APEC statistics are basically based on official data provided by national government agencies of each member economy, and thus, agencies exclude any data not reported to the government. It is assumed that the IEA estimates these quantities.
- For this reason, some data for private-power generations are missing in some member economies.
- APEC and the IEA use different heat conversion methods.
- The reporting date differs in APEC and IEA surveys.

The APEC energy balance table consists of two tables, quoted in ktoe ( $10^{10}$  kilocalories) and in petajoules (PJ equivalent to  $10^{15}$  joules).

#### 1.3.2 Other Tables

Other tables, i.e., primary energy supply, final energy consumption, supply and demand by energy source, electricity and stock change, are all designed to allow comparisons among member economies.

The primary energy supply table shows items that constitute the primary energy supply, namely, indigenous production, imports, exports, stock change, and international marine bunkers in terms of calorific values (ktoe and PJ), for each of the four categories of coal, petroleum, gas, and primary electricity (hydro, nuclear, geothermal power, etc.).

The final consumption table illustrates the consumption of coal (including coal products), petroleum, gas, electricity and others for each final consumption sector (agriculture, residential, commercial, industry and transport).

The supply and demand table for each energy source emphasizes coal, petroleum and gas, and shows, at a balance, how the primary supply volume is being consumed in the transformation and final energy consumption sectors.

The electricity table illustrates the power generation and fossil fuel input for each of the five categories of thermal, hydro, nuclear, geothermal and other sources of power generation.

The stock change table shows the inventory of fossil fuels owned by each member economy, in units of calorific value (ktoe and PJ), at the beginning and end of the period as well as the stock change. Since the conventional approach is to report stock level only in terms of its change, many members omit the stock level at the beginning and end of the term.

## 1.4 Notes on Member Economies

### 1.4.1 General Notes

Most of the member economies' annual data are tallied by calendar year (1 January – 31 December) except for Australia; Australia's energy statistics are accounted by fiscal year (1 July-30 June).

In view of harmonization efforts with the IEA, the C.A. accepts submission from OECD members using the IEA format. Likewise, to reduce the burden on member economies' statisticians the C.A. decided that to leave to IEA the data negotiation with the APEC OECD member economies and just used the processed and updated data from IEA.

### 1.4.2 Specific Notes

#### a. Brunei Darussalam

Brunei Darussalam is not able to submit their annual energy data in the APEC format but in its own format. C.A. enters the data in the APEC reporting format and produces the energy balance table.

#### b. Japan

Energy data after 2000 are not official data prepared by Japanese Government. C.A. used data on energy balance table produced by the Institute of Energy Economics, Japan to maintain continuity of data from before 2000.

#### c. Papua New Guinea

C.A. estimated energy balance tables from 2000 to 2006 for Papua New Guinea from the crude oil and natural gas production, refinery intake and output data, crude oil exports and GDP data obtained from Papua New Guinea.

#### d. Peru

Peru used to submit the annual data using the APEC format. However, the economy was not able to submit the 2007 data for reasons not explained to the C.A. To be able to produce Peru's energy balance and other tables, the C.A. downloaded the energy balances from the website of Peru Ministry of Mines and Energy.

#### e. Singapore

Singapore cannot submit the data on natural gas imports, crude oil inputs and petroleum products output of the refinery sector as well as fuel inputs for electricity generation. Furthermore there are no data in the final energy consumption sectors.

C.A. estimated the energy balance tables for Singapore from 1980 to 2006.

C.A. estimated values in petroleum refinery using import volumes of crude oil and export volumes of petroleum products (assuming the stock change and the discrepancy are 0).

Some erroneous data are corrected by using the IEA energy balance data, data from Energy Market Authority in Singapore, and the socioeconomic indicators (ex: GDP, etc.).

f. Viet Nam

Viet Nam did not submit annual energy data in the APEC format for 2007. In this regard, the C.A. entered the data in the new format and generated the energy balance table.

### 1.5 Socioeconomic Data

At the moment, the socioeconomic data for each member economy shown in the APEC Energy Statistics are not reported by the members, but, instead, are prepared by C.A. The data are derived from the “World Development Indicators” (World Bank) and “The International Financial Statistics Yearbook” (IMF). The data on Chinese Taipei not found in these statistics, are derived from the “Chinese Taipei Statistical Data Book”. This book is regularly delivered to C.A. through the goodwill of this member. The items C.A. picks up from these statistics are:

- Population
- GDP and its components
- Index of Industrial Production
- External Trade (dollar base)
- Balance of Payment (dollar base)
- Exchange Rate
- Prices (CPI, etc.)

The GDP data of Brunei from 1996 are also derived from the “Brunei Darussalam Statistical Yearbook” which is also provided by this member economy to the C.A. through its goodwill.

In addition to reporting the GDP in the member economy’s currency, C.A. provides estimates in real, nominal dollar and real PPP (Purchasing Power Parity) terms.

### 1.6 APEC Energy Database

C.A. has established the APEC Energy Database, which contains all data on APEC Energy Statistics. The web address of the database is: <http://www.ieej.or.jp/egeda/>.

## 2 Overview of the APEC Energy Situation

## 2.1 Overall Notes

Chapter 2 summarizes the energy supply and demand in the APEC region using the energy balance tables of APEC member economies stored in the APEC Energy Database. Energy categories used in this chapter are defined as follows:

### a. Coal:

Coking coal, anthracite, other bituminous coal, sub-bituminous coal, lignite and peat, patent fuel, coke, coal tar, BKB/PB, gas works gas and oxygen steel furnace gas

### b. Oil:

Crude oil, NGL, refinery feedstocks, additives/oxygenates, and other hydrocarbons, refinery gas, ethane, LPG, Naphtha, motor gasoline, aviation gasoline, gasoline type jet fuel, kerosene type jet fuel, other kerosene, gas/diesel oil, fuel oil, white spirit SBP, lubricants, bitumen, paraffin waxes, petroleum coke and other products

### c. Gas:

Natural gas and LNG

### d. Hydro, Nuclear, etc.:

Electricity generated from non-thermal resources such as hydro, nuclear, geothermal, solar and wind

### e. Others:

Incineration and commercial renewable energy

Regional groupings of APEC member economies are as follows:

#### a. East Asia and Russia:

China; Hong Kong, China; Japan; Korea, Russia and Chinese Taipei

#### b. Southeast Asia

Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam

#### c. Oceania:

Australia, New Zealand and Papua New Guinea

#### d. North America:

Canada and the United States of America

#### e. Latin America:

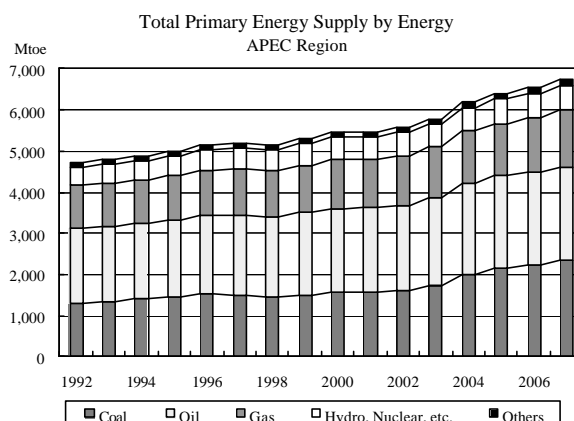
Chile, Mexico and Peru

From 2004, APEC collected the member economies' annual energy data using the new format which resulted to reporting of non-commercial biomass supply and consumption which were not reported until 2003 for some economies. To analyze the historical trend, Non-commercial biomass data of Indonesia, Peru, Thailand and Viet Nam which were not reported before 2004 were excluded in this analysis.

## 2.2 Analysis of Energy Supply and Demand in the APEC Region

This section discusses energy supply and demand in the APEC region.

### 2.2.1 Primary Energy Supply



The level of primary energy supply in 2007 of 6,747 Mtoe increased by 3.0% from the 2006 level of 6,548 Mtoe. In the period 1992 to 2007, primary energy supply had an average growth rate of 2.4% per annum, in contrast with the 3.2% growth in real GDP over the same period. As a result, elasticity of demand was calculated at 0.75 for this period.



For the period 1992 to 2007, coal supply rose at an average rate of 3.9% per annum to reach 2,350 Mtoe. Oil supply rose at an average rate of 1.6% per annum to reach 2,276 Mtoe. Gas supply increased by 1.8% per annum to reach 1,365 Mtoe. The supply of hydro, nuclear, etc. grew by 2.3% per annum to reach 608 Mtoe. The category of "Others" grew 1.2% per annum, the total was small at 148 Mtoe and the share was 2.2% in 2007.

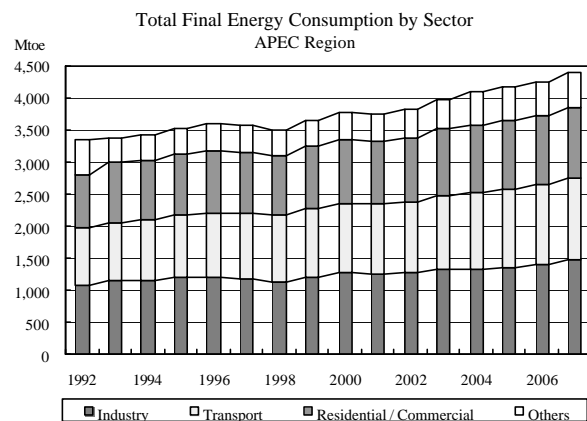
## 2.2.2 Final Energy Consumption

The level of final energy consumption in 2007 of 4,399 Mtoe grew by 3.6% from the 2006 level of 4,245 Mtoe. The growth rate was also 1.9% per annum from 3,340 Mtoe in 1992. This growth rate for 15 years was lower than that of primary energy supply. It indicates that net energy consumption growth in the transformation sector surpassed that of the final energy consumption sector.

The final energy consumption of the residential/commercial and other sectors increased by 3.9%, from 1,584 Mtoe in 2006 to 1,646 Mtoe in 2007. The transport sector consumption grew by 2.2% from 1,255 Mtoe in 2006 to 1,284 Mtoe in 2007 while industrial sector consumption grew by 4.6% from 2006 to 2007.

Its total consumption of 1,470 Mtoe was the largest

for all sectors in 2007 with a share of 33.4% to the total final consumption. The transportation sector share was 29.2% while the residential/commercial sector share was 24.8%.



By fuel, oil consumption increased by 1.9% from 1,986 Mtoe in 2006 to 2,024 Mtoe in 2007. This grew at an average rate of 2.2% per annum from 1,452 Mtoe in 1992.

Electricity consumption rose by 5.6% from 847 Mtoe in 2006 to 895 Mtoe in 2007, gas consumption increased by 5.7% to 665 Mtoe in 2007. Coal consumption grew by 5.1% from 513 Mtoe in 2006 to 539 Mtoe in 2007.

## 2.2.3 Energy Balance Table

This section presents the 2007 aggregate energy

APEC Region	2007												Unit: Mtoe
	1 Coal	2 Coal Products	3 Crude Oil, NGL and Condensate	4 Petroleum Products	5 Gas	6 Hydro	7 Nuclear	8 Geothermal, Solar, etc.	9 Others	10 Electricity	11 Heat	12 Total	
1 Indigenous Production	2,453	-	1,493	6	1,426	136	424	50	147	-	-	6,133	
2 Import	315	9	1,357	428	284	-	-	-	1	9	-	2,402	
3 Export	-400	-15	-543	-372	-352	-	-	-	-0	-9	-	-1,691	
4 International Marine Bunkers	-	-	-	-94	-	-	-	-	-	-	-	-94	
5 Stock Change	-8	-5	1	1	7	-	-	-	-0	-	-	-4	
6 Total Primary Energy Supply	2,360	-11	2,307	-31	1,365	136	424	50	148	-1	-	6,747	
7 Public Electricity	-1,367	-88	-8	-73	-514	-132	-424	-46	-18	996	102	-1,570	
8 Auto-producers of Electricity	-101	-22	-1	-37	-63	-4	-	-0	-26	69	127	-58	
9 Gas Processing	-10	-2	-	-2	-4	-	-	-	-	-	-	-17	
10 Petroleum Refineries	-	-	-2,231	2,226	-	-	-	-	-	-	-	-5	
11 Coal Transformation	-417	284	-	-1	-0	-	-	-	-	-	-	-134	
12 Other Transformation	-	-	-	-	-	-	-	-	-	-	-	-	
13 Loss & Own Use	-49	-13	-11	-114	-126	-0	-	-0	-0	-168	-44	-526	
14 Discrepancy	-16	-10	5	-31	8	-0	-	0	3	-2	-2	-45	
15 Total Final Energy Consumption	400	139	8	2,017	665	-	-	4	90	895	182	4,399	
16 Industry Sector	298	115	3	264	245	-	-	4	58	399	88	1,470	
17 Transport Sector	5	0	0	1,206	58	-	-	-	-	16	-	1,284	
18 Other Sector	76	9	0	252	307	-	-	3	32	480	94	1,254	
18.1 Residential & Commercial	60	9	-	159	302	-	-	3	31	438	89	1,092	
18.2 Agriculture	12	1	0	59	1	-	-	-	1	13	3	90	
18.3 Other	4	0	-	34	3	-	-	-	0	29	2	72	
19 Non-energy	22	15	5	295	56	-	-	-	-	-	-	392	

balance table for the APEC region. Note that the export/import row does not show the volume of trade between APEC and non-APEC regions.

Some of the salient points on the table are:

- 63% of coal is used for power generation.
- Petroleum products consumed by APEC members are mainly refined within the region.
- The percentage share of gas consumption is third, behind petroleum products and electricity. The industrial and residential/commercial sectors are the dominant users.
- The category “Other” consists mainly of wastes and commercial renewable energy, such resources being used to generate electricity and consumed directly in the industry sector and the residential/commercial sector.
- Heat accounts for 4.2% of final consumption.
- Oil and Petroleum Products accounted for 47% of total final energy consumption, followed in order, by electricity, gas, and coal.

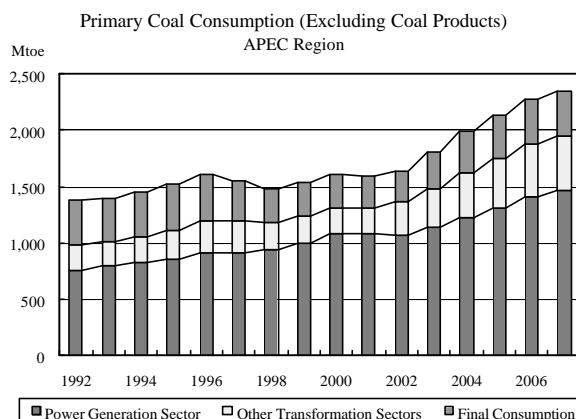
### 2.3 Analysis of Energy Supply and Demand by Energy Sources

This section analyses energy supply and demand in the APEC region by energy sources.

#### 2.3.1 Coal (excluding coal products)

The supply of coal increased by 4.7% from 2,253 Mtoe in 2006 to 2,360 Mtoe in 2007. Its share in the total primary energy supply is 27.9% in 1992 and increased to 35.0% in 2007.

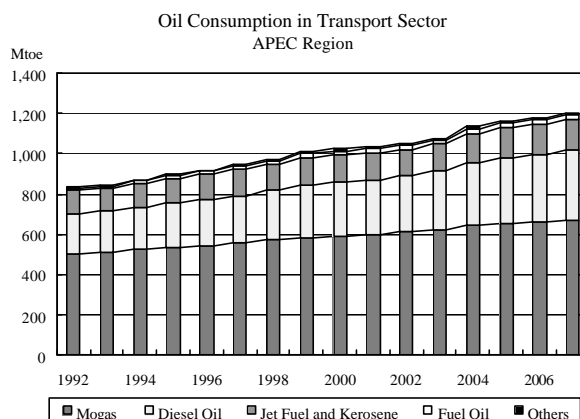
Most coal (excluding coal products) is used for electricity generation, accounting for 62.2% of the total supply in 2007.



#### 2.3.2 Oil

Oil supply increased by 0.9% from 2,288 Mtoe in 2006 to 2,307 Mtoe in 2007. It represented 33.7% of total primary energy supply in 2007.

More than half of all petroleum products are used in the transportation sector, with the major products being motor gasoline and automotive diesel oil. Recently, there has been a marked increase in the consumption of diesel.



#### 2.3.3 Gas

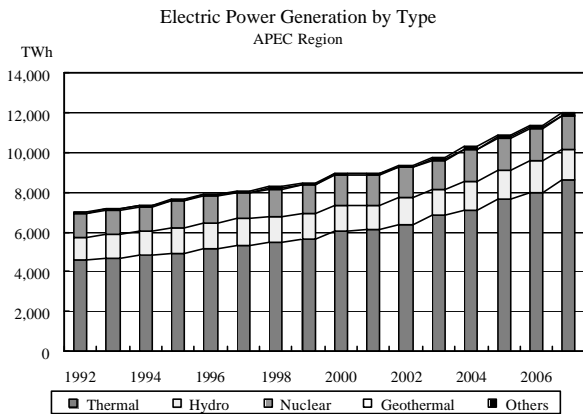
The supply of gas increased by 5.1% from 1,298 Mtoe in 2006 to 1,365 Mtoe in 2007. Gas represented 20.2% of the total primary energy supply in 2007.

Most gas is consumed in the industrial and residential/commercial sectors. As of 2007, 42.2% of gas was used for electric power generation.

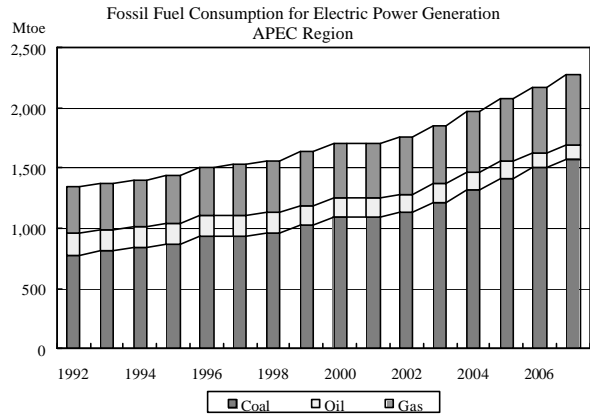
### 2.3.4 Electricity

Power generation rose by 5.5% from 11,399 TWh in 2006 to 12,028 TWh in 2007. From 1992 to 2007, power generation grew at an average rate of 3.7% per annum (from 6,988 TWh). Thermal power generation increased by 7.2% from 8,011 TWh in 2006 to 8,585 TWh in 2007. As a result, the share of thermal power generation was 71.4% of the total in 2007. Nuclear power generation is decreased by 0.2%, from 1,629 TWh in 2006 to 1,625 TWh in 2007. The hydropower generation rose by 2.3% from 1,569 TWh in 2006 to 1,605 TWh in 2007.

Non-fossil electricity generation, which includes hydro and nuclear, increased by 0.3%, from 603 Mtoe in 2006 to 605 Mtoe in 2007. From 1992 until 2007, their collective supply also grew at an average rate of 2.3% per annum.



When discussing the issue of global warming in the APEC region, there is significant room for exploring possible solutions, including improving the efficiency of coal-fired power generation units and converting from coal and oil to gas-fired generation in view of the fact that coal remains and still is the major fuel for electricity generation.



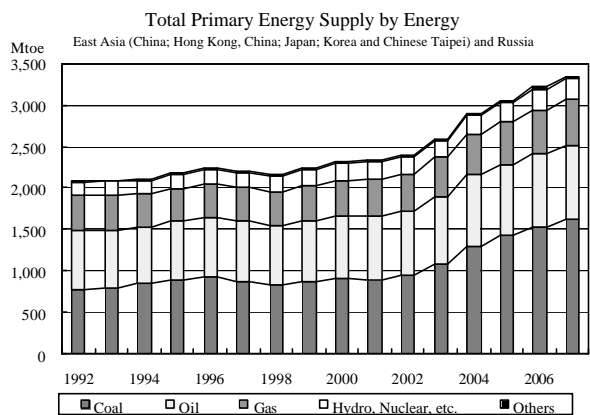
### 2.4 Analysis of Energy Supply and Demand by Region

This section divides the APEC region into five groups, namely East Asia and Russia, Southeast Asia, Oceania, North America and Latin America, to compare their energy supply and demand situations.

#### 2.4.1 East Asia and Russia

Primary energy supply in this region rose by 4.1% to 3,347 Mtoe in 2007. Over the period 1992 to 2007, primary energy supply increased 3.2% per annum (from 2,086 Mtoe).

Coal and oil constitute the main energy sources in East Asia, accounting for 48.5% and 26.6% of total energy supply, respectively, in 2007.

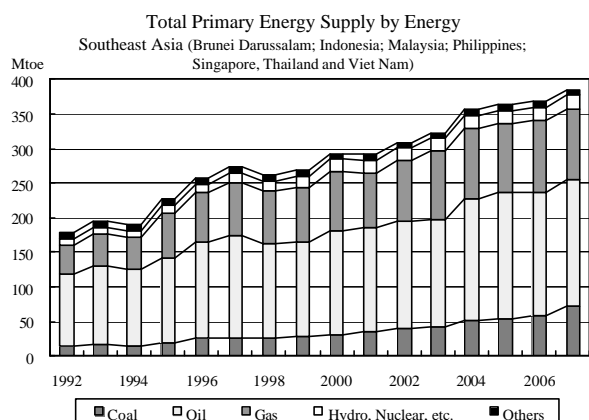


In terms of final energy consumption by sector, the

industrial sector has the highest consumption of 45.9% of total final energy consumption. This is followed in order by the residential/commercial sector and the transportation sector.

### 2.4.2 Southeast Asia

Primary energy supply in Southeast Asia increased by 4.7% to 386 Mtoe in 2007. From 1992 to 2007 it increased at an average rate of 5.2% per annum; the highest rate of growth among the five regional groups. The region's share to the total APEC region increased to 5.7% in 2007 comparing from 3.8% in 1992.



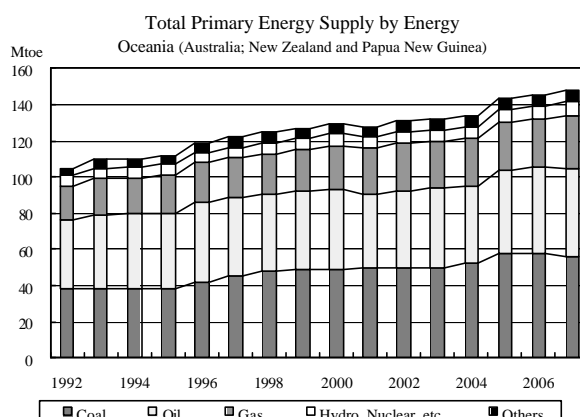
Although Southeast Asia relies heavily on oil, use of coal and gas has been increasing in recent years. Therefore the share of oil has dropped to 47.3% in 2007 from 58.0% in 1992.

The industrial sector consumes the largest amount of energy, followed in order by the transportation and residential/commercial sectors. Because most energy demand in the transportation sector is met by oil, consumption of this fuel has grown steadily.

### 2.4.3 Oceania

Primary energy supply in Oceania increased by 1.8% to 148 Mtoe in 2007. From 1992 to 2007, the average growth rate per annum was 2.3% (from 105 Mtoe). The

Oceania share of total APEC supply was only 2.2% in 2007.

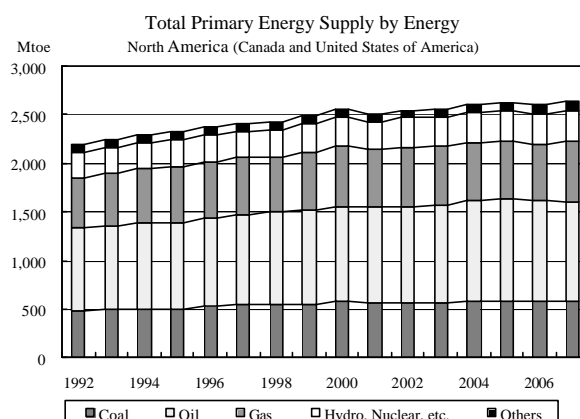


Coal and oil are the major energy sources in Oceania, accounting for 70.9% of total primary energy supply. Oil supply increased by 2.5% and gas supply increased by 8.4% in 2007.

In terms of final energy consumption by sector, the transport sector consumed the highest amount of energy, followed in order by the industrial sector, and the residential/commercial sector.

### 2.4.4 North America

Primary energy supply in North America decreased by 1.4% to 2,636 Mtoe in 2007. From 1992, it grew at an average rate of 1.2% per annum (from 2,196 Mtoe). The region accounted for 39.1% of energy supply in the APEC region in 2007.

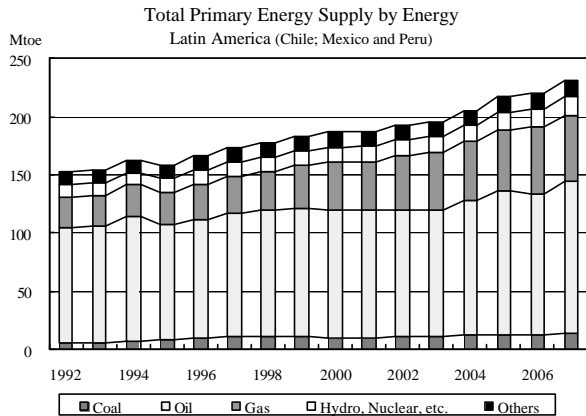


The main energy source in North America is oil, and the supply of oil has increased at an average rate of 1.3% per annum over the past 15 years.

In terms of final energy consumption by sector, energy consumption by the industrial and transportation accounted for 19.1% and 39.6% of the total, respectively. The residential/commercial sector consumed 29.4% of the total.

### 2.4.5 Latin America

Primary energy supply in Latin America grew by 4.8% to 230 Mtoe in 2007, increasing by 2.8% per annum from 152 Mtoe in 1992.



Oil is the major energy source in Latin America and represented 57.1% of the total, followed by gas with a share of 24.5% in 2007.

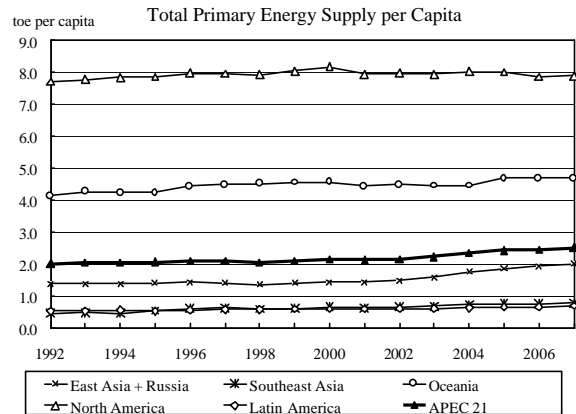
In terms of final energy consumption by sector, the transport and industrial sectors consumed 43.3% and 27.3% of the total, respectively, in 2007.

### 2.5 Other Analyses

This section analyses the per capita primary energy consumption, the elasticity of primary energy supply against real GDP and CO<sub>2</sub> Emissions in the region.

### 2.5.1 Primary Energy Supply Per Capita

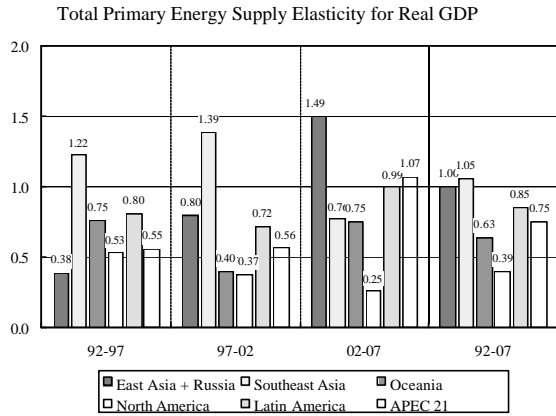
North America had the highest primary energy supply per capita (7.89 toe) in the APEC region in 2007, followed in order by Oceania (4.69 toe), East Asia and Russia (2.01 toe), Southeast Asia (0.77 toe) and Latin America (0.69 toe). The average for APEC was 2.52 toe per capita in 2007.



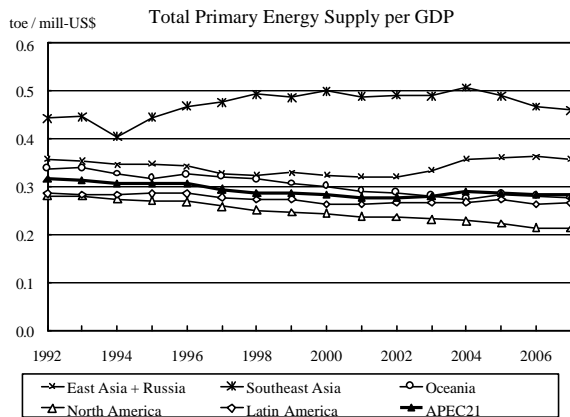
From 1992 to 2007, the APEC average growth rate in energy per capita was 1.5% per annum (from 2.02 toe per capita) while in Southeast Asia, the growth rate was 3.7% per annum. North America showed almost no growth (0.2%) over the same period.

### 2.5.2 Elasticity of Primary Energy Supply against Real GDP

From 1992 to 2007, the elasticity of supply has exceeded 1.0 in Southeast Asia (1.05) over the last 15 years while that of East Asia and Russia was 1.00. The converse is true for Oceania (0.63), North America (0.39, the lowest) and Latin America (0.85). Elasticity for the APEC region as a whole was 0.75. This means that when the GDP of the APEC region increased by one unit, energy supply increased 0.75 units.



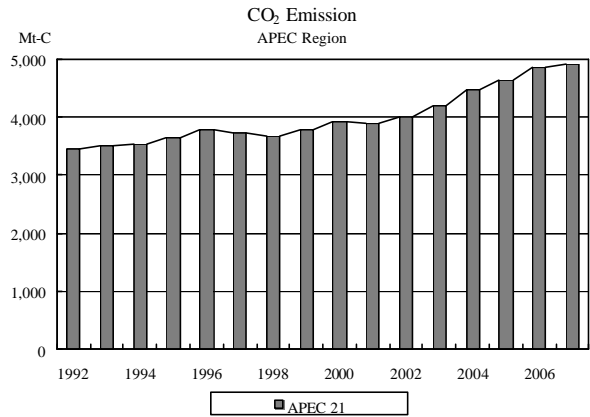
From 1992 to 2007, the average growth rate in energy intensity of GDP was -0.8% per annum (from 0.32 toe/million US\$ to 0.28 toe/million US\$). On the other hand, in Southeast Asia, the growth rate was 0.3% per annum for the last 15 years. In North America, the average growth rate was -1.8% per annum from 1992 to 2007.



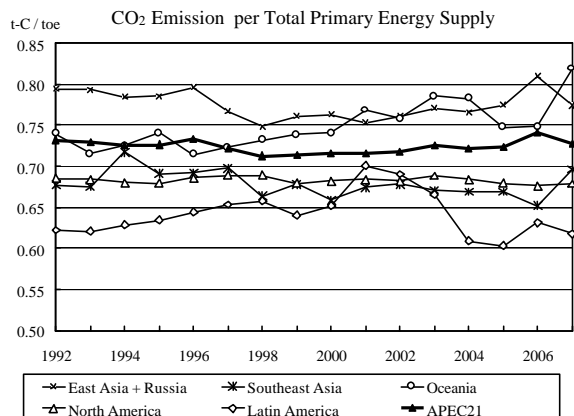
### 2.5.3 CO<sub>2</sub> Emissions from Fuel Combustion

The CO<sub>2</sub> emission data for 2007 were collected from 6 member economies, namely: Hong Kong, China; Japan; New Zealand; Chinese Taipei; Thailand and United States. For the other member economies, the C.A.

estimated the CO<sub>2</sub> emissions. Based on both of the data mentioned above, CO<sub>2</sub> emissions from fuel combustion grew by 1.1% from 4,859 Mt-C in 2006 to 4,912 Mt-C in 2007, or 2.4% per annum from 3,455 Mt-C in 1992. As a result, CO<sub>2</sub> emissions per total primary energy supply, per real GDP and per population became 0.73 t-C/toe, 205.0 t-C/US Million-dollar (at 2000 price) and 1.83 t-C/capita in 2007 respectively.



From 1992 to 2007, the average growth rate in CO<sub>2</sub> per energy was -0.04% per annum (0.728 t-C/toe in 2007), the average growth rate in CO<sub>2</sub> per real GDP decreased by 0.8% per annum, and the average growth rate in CO<sub>2</sub> per capita grew by 1.5% per annum.



## 3 Member Tables

### 3.1 Australia

## Energy Balance Table of Australia in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	218,406	-	25,302	-	-	-	-	-	-
<b>2 Import</b>	-	27	20,740	10,990	2,268	-	881	-	4,669
<b>3 Export</b>	-158,314	-	-15,104	-1,455	-662	-	-101	-	-245
<b>4 International Marine Bunkers</b>	-	-	-	-835	-	-	-	-	-72
<b>5 Stock Changes</b>	-4,998	-367	272	158	22	-	50	4	126
<b>6 Total Primary Energy Supply</b>	55,094	-340	31,210	8,858	1,629	-	830	4	4,478
<b>7 Transfers</b>	-	-	-989	8,021	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-52,498	1,555	-34,855	31,960	14,001	218	4,505	73	9,131
<b>8.1 Main Activity Producer</b>	-49,137	-644	-	-525	-	-	-	-	-372
<b>8.2 Autoproducers</b>	-	-18	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-34,936	32,507	14,001	218	4,505	73	9,503
<b>8.5 Coal Transformation</b>	-3,361	2,218	-	-21	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	82	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-288	-43	-2,389	-	-	-	-	-984
<b>10. Discrepancy</b>	-78	0	4,677	-6,916	-526	-200	-415	-61	319
<b>11 Total Final Energy Consumption</b>	2,518	927	-	39,535	15,104	18	4,920	15	12,945
<b>12 Industry Sector</b>	2,412	861	-	3,826	-	18	-	1	2,625
<b>13 Transport Sector</b>	85	-	-	29,532	14,996	-	4,920	-	8,007
<b>14 Other Sector</b>	21	65	-	2,779	108	-	-	11	2,313
<b>14.1 Residential &amp; Commercial</b>	21	65	-	856	-	-	-	11	535
<b>14.2 Agriculture</b>	-	-	-	1,923	108	-	-	-	1,778
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	3,398	-	-	-	3	-

## Energy Balance Table of Australia in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	203,509	-	23,080	-	-	-	-	-	-
<b>2 Import</b>	-	31	20,002	11,961	2,877	-	688	-	5,261
<b>3 Export</b>	-149,984	-	-12,550	-1,776	-620	-	-106	-	-360
<b>4 International Marine Bunkers</b>	-	-	-	-1,009	-	-	-	-	-198
<b>5 Stock Changes</b>	2,705	-369	-276	-216	-	-	-63	51	-117
<b>6 Total Primary Energy Supply</b>	56,229	-338	30,255	8,959	2,257	-	519	51	4,586
<b>7 Transfers</b>	-	-	-1,156	7,205	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-53,662	1,556	-33,304	31,163	13,098	319	4,388	94	9,156
<b>8.1 Main Activity Producer</b>	-50,302	-626	-	-593	-	-	-	-	-497
<b>8.2 Autoproducers</b>	-	-15	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-33,352	31,778	13,098	319	4,388	94	9,654
<b>8.5 Coal Transformation</b>	-3,360	2,197	-	-22	-	-	-	-	-1
<b>8.6 Other Transformation</b>	-	-	49	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-310	-42	-2,548	-	-	-	-	-1,183
<b>10. Discrepancy</b>	-27	0	4,247	-6,479	-414	-300	-381	-129	-245
<b>11 Total Final Energy Consumption</b>	2,541	908	-	38,301	14,941	19	4,526	16	12,314
<b>12 Industry Sector</b>	2,439	844	-	3,734	-	19	-	-	2,494
<b>13 Transport Sector</b>	79	-	-	28,779	14,835	-	4,526	-	7,497
<b>14 Other Sector</b>	23	65	-	2,783	105	-	-	11	2,323
<b>14.1 Residential &amp; Commercial</b>	23	65	-	831	-	-	-	11	513
<b>14.2 Agriculture</b>	-	-	-	1,952	105	-	-	-	1,810
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	3,004	-	-	-	5	-



Energy Balance Table of Australia in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	38,534	1,266	-	679	5,353	-	-	289,540	
1,314	434	-	-	1,424	4,598	-	-	-	-	-	-	36,355	
-199	-	-	-	-248	-17,774	-	-	-	-	-	-	-192,646	
-763	-	-	-	-	-	-	-	-	-	-	-	-835	
69	-14	-	-	-100	-	-	-	-	-	-	-	-4,935	
420	420	-	-	1,076	25,359	1,266	-	679	5,353	-	-	127,479	
-	614	-	440	6,967	-	-	-	-	-	-	-	7,032	
795	828	978	-	1,432	-8,160	-1,266	-	-537	-1,228	22,238	-	-42,789	
-153	-	-	-	-	-6,355	-1,242	-	-537	-285	21,116	-	-37,609	
-	-	-	-	-	-3,015	-24	-	-	-856	1,122	-	-2,791	
-	-	-	-	-	1,293	-	-	-	-	-	-	1,293	
969	828	978	-	1,432	-	-	-	-	-	-	-	-2,429	
-21	-	-	-	-	-82	-	-	-	-	-	-	-1,247	
-	-	-	-	-	-	-	-	-	-87	-	-	-5	
-73	-	-912	-	-420	-7,895	-	-	-	-	-3,874	-	-14,490	
-114	473	32	-32	-6,392	4,135	-	-	-	0	0	-	1,819	
1,028	2,336	98	408	2,664	13,440	-	-	142	4,126	18,365	-	79,052	
857	223	98	-	4	8,552	-	-	-	2,630	8,213	-	26,494	
168	1,441	-	-	-	403	-	-	-	-	228	-	30,248	
3	344	-	-	-	3,860	-	-	142	1,495	9,923	-	18,286	
3	306	-	-	-	3,857	-	-	142	1,495	9,763	-	16,201	
-	38	-	-	-	3	-	-	-	-	160	-	2,085	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	327	-	408	2,660	626	-	-	-	-	-	-	4,024	

Energy Balance Table of Australia in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	36,933	1,378	-	206	4,987	-	-	270,093	
1,367	349	-	-	1,419	1,204	-	-	-	2	-	-	33,200	
-471	-	-	-	-218	-14,611	-	-	-	-	-	-	-178,921	
-811	-	-	-	-	-	-	-	-	-	-	-	-1,009	
-24	-25	-	-	-38	-	-	-	-	-	-	-	1,844	
60	324	-	-	1,162	23,526	1,378	-	206	4,989	-	-	125,206	
-	670	-	564	5,971	-	-	-	-	-	-	-	6,049	
951	698	968	-	1,489	-6,372	-1,378	-	-148	-1,178	21,643	-	-41,681	
-97	-	-	-	-	-4,822	-1,354	-	-148	-299	20,534	-	-37,611	
-	-	-	-	-	-2,729	-24	-	-	-827	1,109	-	-2,486	
-	-	-	-	-	1,258	-	-	-	-	-	-	1,258	
1,069	698	968	-	1,489	-	-	-	-	-	-	-	-1,574	
-21	-	-	-	-	-79	-	-	-	-	-	-	-1,265	
-	-	-	-	-	-	-	-	-	-52	-	-	-3	
-68	-	-905	-	-391	-5,546	-	-	-	-	-3,614	-	-12,060	
96	956	25	-33	-6,053	1,549	-	-	0	-	0	-	-709	
1,039	2,648	88	531	2,179	13,157	-	-	58	3,811	18,029	-	76,805	
884	244	88	-	5	8,298	-	-	-	2,572	8,076	-	25,962	
152	1,769	-	-	-	379	-	-	-	-	225	-	29,462	
3	341	-	-	-	3,858	-	-	58	1,240	9,727	-	17,754	
3	304	-	-	-	3,856	-	-	58	1,240	9,568	-	15,640	
-	36	-	-	-	2	-	-	-	-	160	-	2,113	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	294	-	531	2,174	623	-	-	-	-	-	-	3,627	

## Major Energy Indicators of Australia

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	69,279	74,566	88,350	94,818	110,408	123,459	125,206	127,479
Indigenous Production	86,084	125,763	158,145	187,221	233,445	270,258	270,093	289,540
Import	13,902	8,843	14,321	20,848	26,382	31,096	33,200	36,355
Export	-32,208	-62,794	-78,856	-110,068	-153,523	-178,900	-178,921	-192,646
Final Energy Consumption	51,533	53,480	57,877	64,020	71,979	77,721	76,805	79,052
Industry	23,239	22,506	19,058	20,866	23,777	25,573	25,962	26,494
Transport	17,547	19,465	22,598	25,019	28,070	30,053	29,462	30,248
Residential & Commercial	8,494	9,198	10,970	12,456	14,102	15,789	15,640	16,201
Agriculture	1,075	1,245	1,301	1,451	1,607	2,237	2,113	2,085
Non-energy	1,176	1,056	3,950	4,228	4,423	4,070	3,627	4,024
<b>Coal, Coal Products</b>								
Primary Energy Supply	26,403	30,318	34,980	37,549	48,156	55,525	55,892	54,754
Indigenous Production	51,868	81,066	106,103	127,823	164,578	204,229	203,509	218,406
Import	-	-	-	-	-	-	31	27
Export	-28,645	-54,442	-67,248	-88,584	-121,425	-150,297	-149,984	-158,314
Transformation Sector	-19,165	-24,037	-30,398	-32,627	-43,637	-51,765	-52,106	-50,943
Power Generation	-19,184	-23,761	-28,773	-30,935	-42,200	-50,137	-50,943	-49,799
Final Energy Consumption	7,328	5,917	4,204	4,287	4,115	3,416	3,449	3,445
Industry	7,107	5,665	3,993	4,113	3,979	3,222	3,282	3,273
Transport	4	88	72	86	88	92	79	85
Residential & Commercial	217	163	139	88	47	102	87	87
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	29,632	27,150	33,075	35,287	36,578	30,792	30,255	31,210
Indigenous Production	19,906	25,990	29,027	28,365	33,911	24,130	23,080	25,302
Import	9,891	6,405	10,210	17,597	22,314	21,377	20,002	20,740
Export	-107	-4,885	-5,856	-10,372	-19,365	-14,828	-12,550	-15,104
Transformation Sector	-29,788	-28,759	-29,443	-33,318	-37,086	-34,076	-33,304	-34,855
Petroleum Refineries	-29,788	-28,759	-29,442	-33,317	-37,085	-34,086	-33,352	-34,936
<b>Petroleum Products</b>								
Primary Energy Supply	805	714	-371	-794	-16	7,503	8,959	8,858
Import	4,012	2,438	4,111	3,251	4,068	9,720	11,961	10,990
Export	-3,456	-3,467	-3,402	-2,857	-3,467	-1,515	-1,776	-1,455
Transformation Sector	29,314	28,362	31,103	35,575	37,739	33,898	31,163	31,960
Power Generation	-1,132	-916	-861	-719	-496	-479	-593	-525
Petroleum Refineries	30,525	29,327	31,980	36,320	38,258	34,399	31,778	32,507
Final Energy Consumption	27,930	26,717	30,413	33,332	37,127	39,008	38,301	39,535
Industry	7,003	4,603	2,822	2,951	3,548	3,418	3,734	3,826
Transport	17,466	19,273	22,360	24,574	27,477	29,393	28,779	29,532
Residential & Commercial	1,327	691	634	653	663	775	831	856
Agriculture	956	1,093	1,096	1,227	1,358	2,083	1,952	1,923
Non-energy	1,176	1,056	3,501	3,927	4,082	3,338	3,004	3,398
<b>Natural Gas</b>								
Primary Energy Supply	7,794	11,249	15,344	17,029	19,095	22,966	23,526	25,359
Indigenous Production	7,794	11,249	17,693	25,285	28,360	35,226	36,933	38,534
Import	-	-	-	-	-	-	1,204	4,598
Export	-	-	-2,350	-8,255	-9,265	-12,260	-14,611	-17,774
Transformation Sector	-1,622	-2,528	-4,092	-4,103	-4,428	-8,277	-6,372	-8,160
Power Generation	-1,642	-2,391	-3,471	-3,562	-4,061	-7,864	-7,551	-9,370
Final Energy Consumption	5,851	8,286	8,810	10,180	11,459	13,444	13,157	13,440
Industry	4,366	6,198	5,666	6,472	7,165	8,408	8,298	8,552
Transport	-	-	10	188	304	353	379	403
Residential & Commercial	1,485	2,079	2,684	3,218	3,648	3,949	3,856	3,857
Agriculture	-	-	1	1	1	2	2	3
Non-energy	-	-	449	301	341	731	623	626
<b>Electricity</b>								
Power Generation	8,261	10,403	13,337	14,909	17,867	21,113	21,643	22,238
Thermal	7,076	9,116	12,057	13,512	16,393	19,746	20,264	20,972
Hydro	1,185	1,287	1,280	1,397	1,474	1,366	1,378	1,266
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	6,966	8,713	11,112	12,460	14,857	17,759	18,029	18,365
Industry	2,948	3,928	5,090	5,599	6,624	7,939	8,076	8,213
Transport	77	103	155	171	201	214	225	228
Residential & Commercial	3,821	4,531	5,663	6,467	7,784	9,453	9,568	9,763
Agriculture	119	152	204	224	248	152	160	160

## Major Economic Indicators of Australia

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	14.69	15.76	17.07	18.07	19.15	20.39	20.70	21.02
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	194.06	222.80	270.13	302.43	373.98	436.45	449.54	464.37
Real Term (Billions of 2000 Price and 2000 PPP)	254.85	292.59	354.73	397.15	491.12	573.15	590.34	609.82
Nominal (Billions of Current USD)	150.28	161.41	309.93	360.71	373.98	685.50	728.52	874.99
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	13,209	14,139	15,829	16,735	19,526	21,400	21,719	22,097
Real Term (2000 Price and 2000 PPP)	17,346	18,568	20,787	21,976	25,642	28,103	28,522	29,018
Nominal (Current USD)	10,229	10,243	18,162	19,960	19,526	33,611	35,198	41,636
Nominal GDP & its Components (Billions of Current AUD) *1								
Gross Domestic Product	131.99	231.12	397.04	486.61	645.06	897.64	967.45	1,045.67
Household Final Consumption Expenditure, etc.	75.29	130.98	224.10	288.52	378.95	521.03	547.46	584.91
General Government Final Consumption Expenditure	23.15	45.13	69.69	89.76	117.37	162.50	173.14	186.21
Gross Fixed Capital Formation	34.04	60.23	106.77	116.27	160.09	231.74	260.76	284.71
Stock Change	1.10	2.29	5.09	1.85	1.60	5.00	0.61	2.65
Exports of Goods and Services	22.02	35.74	60.84	88.10	128.44	167.56	196.27	215.70
Imports of Goods and Services	21.44	40.79	68.77	97.90	141.39	190.19	210.79	228.45
Real GDP & its Components (Billions of 2000 AUD) *1								
Gross Domestic Product	436.99	501.71	608.27	681.00	842.13	982.79	1,012.27	1,045.67
Household Final Consumption Expenditure, etc.	243.80	279.61	332.36	370.42	450.89	548.02	562.23	584.91
General Government Final Consumption Expenditure	77.91	96.47	113.27	127.07	151.15	176.45	180.84	186.21
Gross Fixed Capital Formation	84.57	103.31	129.66	138.92	190.03	247.99	269.93	284.71
Stock Change	1.95	2.49	6.93	3.48	2.76	6.10	2.30	2.65
Exports of Goods and Services	53.00	64.50	86.00	129.11	182.19	203.41	207.89	215.70
Imports of Goods and Services	36.96	51.10	70.76	91.51	135.52	195.12	209.25	228.45
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	3.4	3.4	3.0	2.4	3.0	2.8	2.8	2.2
Industry	31.1	29.9	30.5	29.5	27.9	26.7	26.5	26.7
Services, etc.	54.4	55.9	57.7	59.7	60.9	62.5	62.7	63.2
Industrial Production Index (2005=100) *2	56.4	64.8	76.5	80.6	95.6	100.0	99.6	101.0
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	21.944	22.604	39.752	53.111	63.870	106.097	123.437	141.358
Imports, c.i.f.	22.399	25.889	41.985	61.283	71.529	125.281	139.253	165.336
Balance of Payments (Billions of Current USD) *2								
Trade Balance	1.371	-0.968	0.358	-4.223	-4.862	-13.372	-9.596	-17.770
Current Account	-4.447	-9.172	-15.948	-19.277	-14.763	-41.032	-41.504	-57.569
Overall Balance	0.448	-2.301	1.740	0.396	-1.365	7.256	9.722	-35.148
Foreign Exchange Rate (AUD/USD) *1	0.8782	1.4319	1.2811	1.3490	1.7248	1.3095	1.3280	1.1951
PPP conversion factor, GDP (AUD/International Dollar) *1	0.9897	1.1449	1.3789	1.3202	1.3134	1.3884	1.4081	1.4248
Price Indices								
GDP Deflator (2007=100) *3	30.2	46.1	65.3	71.5	76.6	91.3	95.6	100.0
Manufacturing Output Price Index (2005=100) *2	38.8	55.7	76.6	84.5	87.5	100.0	107.9	110.5
Consumer Price Index (2005=100) *2	31.7	47.3	69.2	78.3	86.1	100.0	103.5	106.0
Growth Rate (%) *3								
Real GDP	3.14	5.33	3.94	4.33	4.00	2.80	3.00	3.30
Population	1.23	1.38	1.49	1.22	1.20	1.33	1.49	1.53
Price								
Manufacturing Output Price Index	14.0	6.6	6.0	4.2	7.1	6.0	7.9	2.3
Consumer Price Index	10.1	6.7	7.3	4.6	4.5	2.7	3.5	2.3

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : AUD means Australian Dollar, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.2 Brunei Darussalam

## Energy Balance Table of Brunei Darussalam in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	-	-	9,424	16	-	-	-	-	-
2 Import	-	-	-	8	-	-	-	-	-
3 Export	-	-	-8,704	-	-	-	-	-	-
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-	-	40	-1	-2	-	1	-	0
6 Total Primary Energy Supply	-	-	760	23	-2	-	1	-	0
7 Transfers	-	-	-	-	-	-	-4	4	-
8 Total Transformation Sector	-	-	-696	644	217	-	82	-	180
8.1 Main Activity Producer	-	-	-	-8	-	-	-	-	-8
8.2 Autoproducers	-	-	-	-	-	-	-	-	-
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-696	652	217	-	82	-	188
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-	-176	-2	-	-1	-	-8
10. Discrepancy	-	-	-63	23	1	-	-1	-0	23
11 Total Final Energy Consumption	-	-	-	513	214	-	77	4	196
12 Industry Sector	-	-	-	54	-	-	-	3	52
13 Transport Sector	-	-	-	434	214	-	77	-	144
14 Other Sector	-	-	-	17	-	-	-	1	0
14.1 Residential & Commercial	-	-	-	17	-	-	-	1	0
14.2 Agriculture	-	-	-	0	-	-	-	-	0
14.3 Other	-	-	-	-	-	-	-	-	-
15 Non-energy	-	-	-	8	-	-	-	-	-

## Energy Balance Table of Brunei Darussalam in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	-	-	11,208	15	-	-	-	-	-
2 Import	-	-	-	13	-	-	-	-	-
3 Export	-	-	-10,536	-	-	-	-	-	-
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-	-	77	-7	-2	-	1	-	-6
6 Total Primary Energy Supply	-	-	749	21	-2	-	1	-	-6
7 Transfers	-	-	-	-	-	-	-4	4	-
8 Total Transformation Sector	-	-	-735	631	222	-	81	-	185
8.1 Main Activity Producer	-	-	-	-	-	-	-	-	-
8.2 Autoproducers	-	-	-	-8	-	-	-	-	-8
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-735	639	222	-	81	-	193
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-	-155	-2	-	-0	-	-10
10. Discrepancy	-	-	-13	16	1	-	-0	0	16
11 Total Final Energy Consumption	-	-	-	514	220	-	78	4	185
12 Industry Sector	-	-	-	56	-	-	-	3	53
13 Transport Sector	-	-	-	429	220	-	78	-	131
14 Other Sector	-	-	-	15	-	-	-	1	0
14.1 Residential & Commercial	-	-	-	15	-	-	-	1	0
14.2 Agriculture	-	-	-	0	-	-	-	-	0
14.3 Other	-	-	-	-	-	-	-	-	-
15 Non-energy	-	-	-	14	-	-	-	-	-

Energy Balance Table of Brunei Darussalam in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	16	-	-	-	11,394	-	-	-	-	-	-	20,834
-	-	-	-	8	-	-	-	-	-	-	-	8
-	-	-	-	-	-8,240	-	-	-	-	-	-	-16,944
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-0	-	-	0	12	-	-	-	-	-	-	51
-	16	-	-	8	3,166	-	-	-	-	-	-	3,949
-	-	-	-	-	-	-	-	-	-	-	-	-
92	-	73	-	-	-1,984	-	-	-	-	292	-	-1,745
-	-	-	-	-	-1,030	-	-	-	-	262	-	-776
-	-	-	-	-	-863	-	-	-	-	30	-	-833
-	-	-	-	-	-92	-	-	-	-	-	-	-92
92	-	73	-	-	-	-	-	-	-	-	-	-45
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-92	-	-73	-	-	-539	-	-	-	-	-24	-	-740
-	-1	-	-	-1	-614	-	-	-	-	0	-	-655
-	15	-	-	8	29	-	-	-	-	268	-	810
-	-	-	-	-	-	-	-	-	-	48	-	102
-	-	-	-	-	-	-	-	-	-	-	-	434
-	15	-	-	-	29	-	-	-	-	220	-	265
-	15	-	-	-	29	-	-	-	-	220	-	265
-	-	-	-	-	-	-	-	-	-	-	-	0
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	8	-	-	-	-	-	-	-	8

Energy Balance Table of Brunei Darussalam in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	15	-	-	-	11,816	-	-	-	-	-	-	23,038
-	-	-	-	13	-	-	-	-	-	-	-	13
-	-	-	-	-	-8,537	-	-	-	-	-	-	-19,073
-	-	-	-	-	-	-	-	-	-	-	-	-
-	0	-	-	0	-10	-	-	-	-	-	-	60
-	15	-	-	13	3,269	-	-	-	-	-	-	4,039
-	-	-	-	-	-	-	-	-	-	-	-	-
102	-	40	-	-	-2,002	-	-	-	-	284	-	-1,823
-	-	-	-	-	-1,040	-	-	-	-	254	-	-786
-	-	-	-	-	-883	-	-	-	-	30	-	-861
-	-	-	-	-	-80	-	-	-	-	-	-	-80
102	-	40	-	-	-	-	-	-	-	-	-	-96
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-102	-	-40	-	-	-571	-	-	-	-	-26	-	-751
-	-1	-	-	0	-682	-	-	-	-	0	-	-679
-	14	-	-	14	13	-	-	-	-	258	-	785
-	-	-	-	-	-	-	-	-	-	48	-	104
-	-	-	-	-	-	-	-	-	-	-	-	429
-	14	-	-	-	13	-	-	-	-	210	-	238
-	14	-	-	-	13	-	-	-	-	-	-	28
-	-	-	-	-	-	-	-	-	-	-	-	0
-	-	-	-	-	-	-	-	-	-	210	-	210
-	-	-	-	14	-	-	-	-	-	-	-	14

## Major Energy Indicators of Brunei Darussalam

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	3,245	1,880	2,071	2,712	2,701	2,322	4,039	3,949
Indigenous Production	20,664	14,693	15,259	17,395	17,411	21,630	23,038	20,834
Import	215	40	80	36	22	43	13	8
Export	-17,589	-12,512	-12,977	-14,678	-14,845	-19,362	-19,073	-16,944
Final Energy Consumption	241	401	417	632	636	776	785	810
Industry	39	43	53	109	91	96	104	102
Transport	165	246	255	330	324	418	429	434
Residential & Commercial	37	113	108	150	198	246	28	265
Agriculture	-	-	-	-	0	0	0	0
Non-energy	-	-	-	42	18	17	14	8
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	-	-	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	167	50	38	534	566	697	749	760
Indigenous Production	12,121	7,499	7,677	8,465	9,006	10,487	11,208	9,424
Import	-	-	76	-	-	-	-	-
Export	-11,919	-7,108	-7,424	-7,900	-8,541	-9,806	-10,536	-8,704
Transformation Sector	-	-223	65	-534	-573	-706	-735	-696
Petroleum Refineries	-	-223	-321	-534	-573	-706	-735	-696
<b>Petroleum Products</b>								
Primary Energy Supply	215	34	0	40	22	38	21	23
Import	215	40	4	36	22	43	13	8
Export	-	-6	-3	-0	-1	-	-	-
Transformation Sector	-	220	314	540	573	632	631	644
Power Generation	-	-1	-3	-4	-5	-8	-8	-8
Petroleum Refineries	-	188	290	533	566	639	639	652
Final Energy Consumption	215	314	309	451	401	499	514	513
Industry	31	27	17	65	40	47	56	54
Transport	165	246	255	330	324	418	429	434
Residential & Commercial	19	42	37	13	14	17	15	17
Agriculture	-	-	-	-	0	0	0	0
Non-energy	-	-	-	42	18	17	14	8
<b>Natural Gas</b>								
Primary Energy Supply	2,863	1,796	2,033	2,138	2,113	1,587	3,269	3,166
Indigenous Production	8,543	7,194	7,583	8,931	8,405	11,143	11,816	11,394
Import	-	-	-	-	-	-	-	-
Export	-5,670	-5,398	-5,549	-6,778	-6,302	-9,556	-8,537	-8,240
Transformation Sector	-1,726	-1,848	-1,226	-1,886	-1,378	-1,078	-2,002	-1,984
Power Generation	-733	-955	-517	-1,312	-1,378	-1,078	-1,923	-1,893
Final Energy Consumption	-	36	25	33	22	13	13	29
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	36	25	33	22	13	13	29
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	33	61	101	188	244	281	284	292
Thermal	33	61	101	188	244	281	284	292
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	26	51	82	149	213	264	258	268
Industry	8	16	36	44	51	49	48	48
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	18	35	46	104	161	215	-	220
Agriculture	-	-	-	-	-	-	-	-



## Major Economic Indicators of Brunei Darussalam

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	0.19	0.22	0.26	0.29	0.33	0.37	0.38	0.39
Gross Domestic Product *4								
Real Term (Billions of 2000 Price and 2000 USD)	5.77	4.79	4.81	5.62	6.00	6.65	6.94	6.99
Real Term (Billions of 2000 Price and 2000 PPP)	5.77	4.79	4.81	5.62	6.00	6.65	6.94	6.99
Nominal (Billions of Current USD)	4.93	3.52	3.52	4.73	6.00	9.53	11.47	12.28
GDP per Capita *4								
Real Term (2000 Price and 2000 USD)	29,916	21,495	18,714	19,043	17,997	17,788	18,175	17,945
Real Term (2000 Price and 2000 PPP)	29,916	21,495	18,714	19,043	17,997	17,788	18,175	17,945
Nominal (Current USD)	25,534	15,800	13,698	16,049	17,997	25,497	30,031	31,556
Nominal GDP & its Components (Billions of Current BND) *1								
Gross Domestic Product	10.55	7.75	6.38	6.71	10.35	15.86	18.23	18.51
Household Final Consumption Expenditure, etc.	0.74	N.A.	1.69	2.46	2.57	3.56	3.61	3.72
General Government Final Consumption Expenditure	0.88	N.A.	1.40	1.80	2.67	2.92	3.29	3.84
Gross Fixed Capital Formation	N.A.	N.A.	1.19	2.46	1.34	1.80	1.91	2.40
Stock Change	N.A.	N.A.	0.00	0.00	0.01	0.00	-0.01	0.00
Exports of Goods and Services	9.85	N.A.	3.94	4.01	6.97	11.13	13.09	12.52
Imports of Goods and Services	1.23	N.A.	2.38	3.75	3.71	4.33	4.60	5.15
Real GDP & its Components (Billions of 2000 BND) *1								
Gross Domestic Product	9.96	8.26	8.29	9.68	10.35	11.46	11.97	12.04
Household Final Consumption Expenditure, etc.	N.A.	N.A.	2.02	2.51	2.57	3.49	3.62	3.69
General Government Final Consumption Expenditure	N.A.	N.A.	2.11	2.45	2.67	2.87	3.24	3.75
Gross Fixed Capital Formation	N.A.	N.A.	1.55	2.35	1.34	1.72	1.74	2.20
Stock Change	N.A.	N.A.	0.00	0.00	0.01	0.00	0.00	0.00
Exports of Goods and Services	N.A.	N.A.	4.91	6.62	6.97	7.49	7.77	7.01
Imports of Goods and Services	N.A.	N.A.	2.98	4.69	3.71	4.25	4.43	5.01
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	N.A.	N.A.	0.8	0.8	1.0	1.3	1.1	1.1
Industry	N.A.	N.A.	63.3	65.0	63.7	61.2	60.3	56.6
Services, etc.	N.A.	N.A.	35.9	34.2	35.3	37.5	38.6	42.4
Industrial Production Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	4.581	2.972	2.213	2.402	3.903	6.249	7.636	7.668
Imports, c.i.f.	0.572	0.615	1.001	2.091	1.107	1.491	1.676	2.101
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	N.A.	N.A.	N.A.	N.A.	4.834	6.041	N.A.
Current Account	N.A.	N.A.	N.A.	N.A.	N.A.	4.038	5.232	N.A.
Overall Balance	N.A.	N.A.	N.A.	N.A.	N.A.	-0.009	0.030	N.A.
Foreign Exchange Rate (BND/USD) *1	2.1412	2.2001	1.8125	1.4174	1.7240	1.6644	1.5889	1.5071
Purchasing Power Parity (BND/International Dollar) *1	1.4480	0.9932	0.6956	0.5549	1.7240	0.9031	0.9634	0.9474
Price Indices								
GDP Deflator (2000=100) *4	106.0	93.8	77.0	69.3	100.0	138.4	152.3	153.7
Wholesale Price Index (2000=100) *2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index (2005=100) *2	61.1	75.7	81.7	95.2	99.4	100.0	100.1	N.A.
Growth Rate (%) *4								
Real GDP	-7.00	-1.49	1.09	4.48	2.85	0.39	4.40	0.62
Population	3.35	2.84	2.87	2.68	2.40	2.22	2.17	1.91
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index	N.A.	2.4	2.1	6.0	1.6	1.2	0.1	N.A.

Source \*1 : "World Development Indicators", World Bank

\*2 : "International Financial Statistics", International Monetary Fund

\*3 : "Brunei Darussalam Statistical Yearbook", Statistical Division, Department of Economic Planning and Development, Ministry of Finance

\*4 : Calculated from \*1, \*2 and \*3 by the Coordinating Agency

Note : N.A. means "not available"

: BND means Brunei Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.3 Canada

Energy Balance Table of Canada in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	33,887	-	161,514	-	-	-	-	-	-
<b>2 Import</b>	12,990	565	43,238	13,478	3,473	81	2,459	157	1,555
<b>3 Export</b>	-17,868	-116	-98,608	-21,726	-6,729	-370	-389	-77	-7,170
<b>4 International Marine Bunkers</b>	-	-	-	-633	-	-	-	-	-41
<b>5 Stock Changes</b>	617	-	-1,101	-616	-66	40	-20	26	-8
<b>6 Total Primary Energy Supply</b>	29,626	449	105,043	-9,497	-3,322	-249	2,050	106	-5,664
<b>7 Transfers</b>	-	-	-8,336	17,359	763	736	-392	-1,502	1,718
<b>8 Total Transformation Sector</b>	-27,572	1,325	-99,715	104,897	36,102	4,049	4,302	1,615	31,644
<b>8.1 Main Activity Producer</b>	-24,654	-	-	-2,137	-	-	-	-	-126
<b>8.2 Autoproducers</b>	-5	-26	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-100,336	107,034	36,102	4,049	4,302	1,615	31,770
<b>8.5 Coal Transformation</b>	-2,912	1,351	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	620	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-26	-330	-	-9,964	-1	-5	-1	-	-31
<b>10. Discrepancy</b>	-222	-0	3,008	-9,809	-114	-732	-97	26	246
<b>11 Total Final Energy Consumption</b>	1,806	1,443	-	92,986	33,427	3,798	5,862	245	27,913
<b>12 Industry Sector</b>	1,770	1,443	-	6,216	-	-	-	25	3,598
<b>13 Transport Sector</b>	-	-	-	54,325	33,427	-	5,862	-	13,839
<b>14 Other Sector</b>	36	-	-	13,049	-	-	-	220	10,476
<b>14.1 Residential &amp; Commercial</b>	36	-	-	10,516	-	-	-	217	8,216
<b>14.2 Agriculture</b>	-	-	-	2,533	-	-	-	3	2,260
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	19,397	-	3,798	-	-	-

Energy Balance Table of Canada in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	32,350	-	155,931	-	-	-	-	-	-
<b>2 Import</b>	12,038	652	42,840	14,398	4,948	41	2,571	133	975
<b>3 Export</b>	-16,779	-67	-95,275	-20,829	-6,341	-311	-575	-106	-6,953
<b>4 International Marine Bunkers</b>	-	-	-	-534	-	-	-	-	-78
<b>5 Stock Changes</b>	375	30	173	-645	2	46	58	62	-84
<b>6 Total Primary Energy Supply</b>	27,985	615	103,669	-7,609	-1,391	-224	2,053	89	-6,141
<b>7 Transfers</b>	-	-	-8,822	19,495	34	904	-282	-1,452	1,923
<b>8 Total Transformation Sector</b>	-26,231	1,160	-97,938	101,298	33,351	3,968	4,122	1,651	31,105
<b>8.1 Main Activity Producer</b>	-23,300	-	-	-2,349	-	-	-	-	-136
<b>8.2 Autoproducers</b>	-5	-32	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-98,068	103,648	33,351	3,968	4,122	1,651	31,241
<b>8.5 Coal Transformation</b>	-2,926	1,192	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	130	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-15	-332	-	-9,570	-1	-3	-	-	-20
<b>10. Discrepancy</b>	-79	-1	3,092	-13,093	265	-939	-118	6	-408
<b>11 Total Final Energy Consumption</b>	1,660	1,441	-	90,520	32,258	3,706	5,774	294	26,459
<b>12 Industry Sector</b>	1,621	1,441	-	6,019	-	-	-	35	3,378
<b>13 Transport Sector</b>	-	-	-	51,838	32,258	-	5,774	-	12,760
<b>14 Other Sector</b>	39	-	-	12,633	-	-	-	259	10,321
<b>14.1 Residential &amp; Commercial</b>	39	-	-	10,309	-	-	-	256	8,200
<b>14.2 Agriculture</b>	-	-	-	2,324	-	-	-	3	2,120
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	20,030	-	3,706	-	-	-

Energy Balance Table of Canada in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	150,630	31,693	24,364	262	11,456	-	-	413,806
1,773	6	-	-	3,975	10,203	-	-	-	257	1,667	-	82,398
-4,078	-354	-	-	-2,559	-90,037	-	-	-	-10	-3,843	-	-232,208
-592	-	-	-	-	-	-	-	-	-	-	-	-633
-9	-5	-	-	-574	8,225	-	-	-	-	-	-	7,125
-2,906	-352	-	-	842	79,021	31,693	24,364	262	11,703	-2,177	-	270,487
295	2,248	-	6,173	7,320	-	-	-	-	-	-	-	9,023
6,715	2,122	6,661	-	11,688	-9,818	-31,693	-24,364	-262	-2,654	55,026	848	-33,983
-1,358	-	-	-	-653	-6,176	-29,147	-24,364	-262	-11	50,732	804	-35,214
-	-	-	-	-	-1,923	-2,546	-	-	-1,983	4,294	43	-2,146
-	-	-	-	-	-1,150	-	-	-	-	-	-	-1,150
8,072	2,122	6,661	-	12,341	-	-	-	-	-	-	-	6,698
-	-	-	-	-	-	-	-	-	-	-	-	-1,561
-	-	-	-	-	-569	-	-	-	-660	-	-	-609
-509	-26	-6,661	-	-2,731	-15,029	-	-	-	-1	-9,133	-	-34,483
152	178	-	-	-9,468	1,640	-	-	-	0	-	0	-5,382
3,747	4,170	-	6,173	7,651	55,814	-	-	-	9,048	43,717	848	205,661
1,677	892	-	-	24	22,724	-	-	-	7,190	17,446	711	57,501
929	268	-	-	-	4,149	-	-	-	-	348	-	58,821
1,141	1,212	-	-	-	25,600	-	-	-	1,858	25,923	136	66,601
1,049	1,035	-	-	-	25,120	-	-	-	1,858	25,129	91	62,750
92	177	-	-	-	479	-	-	-	0	779	1	3,793
-	-	-	-	-	-	-	-	-	-	14	44	58
-	1,797	-	6,173	7,628	3,342	-	-	-	-	-	-	22,738

Energy Balance Table of Canada in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	154,909	30,569	25,529	217	11,720	-	-	411,225
1,431	-	-	-	4,301	7,923	-	-	-	27	2,032	-	79,911
-3,398	-330	-	-	-2,816	-83,797	-	-	-	-19	-3,675	-	-220,441
-456	-	-	-	-	-	-	-	-	-	-	-	-534
-56	42	-	-	-714	616	-	-	-	-	-	-	549
-2,479	-288	-	-	771	79,651	30,569	25,529	217	11,728	-1,644	-	270,710
849	2,796	-	6,211	8,512	-	-	-	-	-	-	-	10,672
6,187	1,954	6,432	-	12,529	-8,824	-30,569	-25,529	-217	-2,238	52,973	907	-35,208
-1,267	-	-	-	-945	-5,440	-27,695	-25,529	-217	-	48,390	864	-35,276
-	-	-	-	-	-1,764	-2,874	-	-	-2,100	4,583	43	-2,148
-	-	-	-	-	-990	-	-	-	-	-	-	-990
7,454	1,954	6,432	-	13,474	-	-	-	-	-	-	-	5,580
-	-	-	-	-	-	-	-	-	-	-	-	-1,734
-	-	-	-	-	-630	-	-	-	-138	-	-	-639
-572	-17	-6,432	-	-2,524	-14,897	-	-	-	-	-8,627	-0	-33,442
-444	12	-	-	-11,468	-5,372	-	-	-	0	-0	-0	-15,454
3,540	4,458	-	6,211	7,820	50,558	-	-	-	9,490	42,702	907	197,279
1,758	828	-	-	21	19,328	-	-	-	7,637	17,494	802	54,343
792	253	-	-	-	4,091	-	-	-	-	390	-	56,318
990	1,063	-	-	-	23,763	-	-	-	1,853	24,818	105	63,211
943	909	-	-	-	23,323	-	-	-	1,853	23,963	61	59,548
47	154	-	-	-	440	-	-	-	-	847	1	3,613
-	-	-	-	-	-	-	-	-	-	8	43	51
-	2,314	-	6,211	7,799	3,376	-	-	-	-	-	-	23,406

## Major Energy Indicators of Canada

	1980	1985	1990	1995	2000	2005	2006	2007
ktoe								
<b>Total</b>								
Primary Energy Supply	194,245	193,954	209,514	232,667	253,293	273,136	270,710	270,487
Indigenous Production	207,701	240,481	273,752	349,840	373,733	401,577	411,225	413,806
Import	41,540	29,044	46,402	45,262	72,052	82,008	79,911	82,398
Export	-52,494	-79,607	-105,714	-164,902	-199,686	-215,690	-220,441	-232,208
Final Energy Consumption	156,724	153,478	159,876	174,492	190,241	203,798	197,279	205,661
Industry	61,067	61,887	47,276	50,113	54,686	57,547	54,343	57,501
Transport	45,020	39,861	44,035	48,631	53,272	56,636	56,318	58,821
Residential & Commercial	48,190	48,844	50,564	53,988	58,293	62,429	59,548	62,750
Agriculture	2,431	2,866	3,247	3,834	4,200	3,570	3,613	3,793
Non-energy	12	14	14,697	17,867	19,731	23,561	23,406	22,738
<b>Coal, Coal Products</b>								
Primary Energy Supply	21,293	26,930	24,276	25,318	31,661	28,829	28,600	30,075
Indigenous Production	20,204	33,742	37,927	40,846	34,407	31,865	32,350	33,887
Import	10,808	10,141	9,547	6,942	15,048	11,778	12,691	13,555
Export	-10,203	-18,217	-21,442	-23,589	-19,269	-16,854	-16,846	-17,984
Transformation Sector	-16,316	-21,021	-21,399	-22,420	-28,643	-25,619	-25,071	-26,247
Power Generation	-14,797	-19,781	-19,972	-20,791	-26,964	-24,005	-23,337	-24,686
Final Energy Consumption	5,657	5,350	2,924	2,664	2,939	3,066	3,101	3,249
Industry	5,554	5,243	2,872	2,609	2,902	3,031	3,062	3,214
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	103	107	51	55	37	35	39	36
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	97,222	73,335	83,137	84,621	96,846	106,409	103,669	105,043
Indigenous Production	85,309	86,990	94,487	113,877	128,870	148,011	155,931	161,514
Import	28,162	14,362	27,133	30,483	46,941	46,636	42,840	43,238
Export	-15,229	-28,382	-37,811	-60,517	-78,446	-85,863	-95,275	-98,608
Transformation Sector	-96,888	-73,426	-85,817	-82,927	-94,872	-99,071	-97,938	-99,715
Petroleum Refineries	-96,888	-73,426	-85,817	-82,927	-94,997	-99,231	-98,068	-100,336
<b>Petroleum Products</b>								
Primary Energy Supply	-6,363	-2,255	-5,370	-5,544	-7,814	-8,340	-7,609	-9,497
Import	2,314	4,271	7,673	6,647	7,362	14,019	14,398	13,478
Export	-6,408	-7,946	-11,857	-12,332	-14,895	-21,818	-20,829	-21,726
Transformation Sector	92,316	71,272	83,119	83,886	93,681	101,920	101,298	104,897
Power Generation	-2,998	-1,536	-3,532	-2,267	-2,853	-3,200	-2,349	-2,137
Petroleum Refineries	95,314	72,807	86,651	86,154	96,534	105,120	103,648	107,034
Final Energy Consumption	81,315	65,494	69,700	73,305	82,041	94,190	90,520	92,986
Industry	20,046	15,659	6,787	5,751	6,457	8,832	6,019	6,216
Transport	43,191	37,695	40,857	43,241	48,125	51,971	51,838	54,325
Residential & Commercial	16,583	10,416	8,736	8,061	9,027	10,959	10,309	10,516
Agriculture	1,478	1,705	2,006	2,532	2,787	2,262	2,324	2,533
Non-energy	12	14	11,315	13,721	15,645	20,167	20,030	19,397
<b>Natural Gas</b>								
Primary Energy Supply	45,889	49,902	54,743	67,110	74,259	80,624	79,651	79,021
Indigenous Production	63,643	70,240	88,579	130,252	148,361	154,077	154,909	150,630
Import	2	5	521	551	1,329	7,833	7,923	10,203
Export	-18,057	-21,329	-33,045	-64,727	-82,681	-87,402	-83,797	-90,037
Transformation Sector	-1,806	-1,201	-2,447	-5,752	-8,812	-9,249	-8,824	-9,818
Power Generation	-1,806	-1,201	-1,868	-4,325	-7,356	-7,512	-7,203	-8,099
Final Energy Consumption	35,108	41,674	43,314	50,762	53,426	51,626	50,558	55,814
Industry	17,137	19,284	16,856	18,321	19,318	18,756	19,328	22,724
Transport	1,634	1,935	2,897	5,057	4,758	4,299	4,091	4,149
Residential & Commercial	16,058	20,056	19,681	22,744	24,677	24,752	23,323	25,120
Agriculture	279	399	498	493	586	425	440	479
Non-energy	-	-	3,382	4,146	4,086	3,394	3,376	3,342
<b>Electricity</b>								
Power Generation	32,245	39,245	41,465	48,170	52,091	53,848	52,973	55,026
Thermal	1,127	-1,796	-3,105	-6,231	2,278	-1,419	-3,125	-1,030
Hydro	21,769	26,163	25,529	28,899	30,841	31,281	30,569	31,693
Nuclear	9,348	14,878	19,041	25,502	18,971	23,986	25,529	24,364
Final Energy Consumption	26,440	31,915	35,960	38,425	41,421	44,046	42,702	43,717
Industry	12,035	14,718	14,443	15,891	17,485	18,197	17,494	17,446
Transport	196	232	281	333	389	366	390	348
Residential & Commercial	13,535	16,203	20,484	21,381	22,710	24,593	23,963	25,129
Agriculture	674	762	743	808	826	881	847	779

## Major Economic Indicators of Canada

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	24.59	25.94	27.79	29.35	30.77	32.31	32.65	32.98
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	411.96	471.72	543.64	592.05	724.91	821.92	844.59	867.40
Real Term (Billions of 2000 Price and 2000 PPP)	496.12	568.09	654.70	713.00	873.01	989.83	1,017.14	1,044.60
Nominal (Billions of Current USD)	268.89	355.71	582.74	590.50	724.91	1,134.78	1,274.99	1,329.88
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	16,751	18,184	19,562	20,169	23,559	25,437	25,869	26,304
Real Term (2000 Price and 2000 PPP)	20,173	21,898	23,558	24,290	28,372	30,633	31,154	31,678
Nominal (Current USD)	10,934	13,712	20,968	20,117	23,559	35,119	39,052	40,329
Nominal GDP & its Components (Billions of Current CAD) *1								
Gross Domestic Product	314.39	485.71	679.92	810.43	1,076.58	1,375.08	1,446.31	1,428.43
Household Final Consumption Expenditure, etc.	168.48	266.68	385.41	460.91	596.01	760.70	803.50	N.A.
General Government Final Consumption Expenditure	67.08	106.07	151.42	172.46	200.08	262.65	279.81	N.A.
Gross Fixed Capital Formation	72.94	98.09	144.86	143.00	206.27	289.37	318.22	N.A.
Stock Change	-0.68	3.48	-2.68	9.03	11.53	9.67	7.78	N.A.
Exports of Goods and Services	88.29	137.38	175.51	302.48	490.69	520.38	524.71	N.A.
Imports of Goods and Services	82.46	126.08	174.62	276.62	428.75	468.20	487.66	N.A.
Real GDP & its Components (Billions of 2000 CAD) *1								
Gross Domestic Product	611.81	700.56	807.37	879.26	1,076.58	1,220.64	1,254.31	1,288.18
Household Final Consumption Expenditure, etc.	359.48	396.86	467.95	500.52	596.01	698.28	727.43	N.A.
General Government Final Consumption Expenditure	144.71	160.73	184.41	188.25	200.08	230.23	237.87	N.A.
Gross Fixed Capital Formation	116.92	122.60	157.25	149.11	206.27	270.22	289.69	N.A.
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	135.50	178.43	220.55	326.07	490.69	504.57	508.20	N.A.
Imports of Goods and Services	133.41	160.08	221.57	291.53	428.75	501.67	526.62	N.A.
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	2.7	2.6	2.6	2.4	2.1	2.0	1.9	N.A.
Industry	33.0	32.3	30.7	30.1	30.8	28.9	28.5	N.A.
Services, etc.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Industrial Production Index (2005=100) *2	52.0	60.3	64.2	72.4	88.6	100.0	102.9	105.4
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	67.734	90.950	127.629	192.197	276.635	360.475	388.091	420.693
Imports, c.i.f.	62.544	80.640	123.244	168.426	244.786	322.411	357.651	389.911
Balance of Payments (Billions of Current USD) *2								
Trade Balance	7.939	11.867	9.513	25.855	45.047	63.266	57.029	59.523
Current Account	-6.088	-5.734	-19.764	-4.328	19.622	33.243	31.319	29.936
Overall Balance	-0.536	-3.270	1.139	2.711	3.720	1.335	0.826	3.906
Foreign Exchange Rate (CAD/USD) *1	1.1692	1.3655	1.1668	1.3724	1.4851	1.2118	1.1344	1.0741
Purchasing Power Parity (CAD/International Dollar) *1	1.1549	1.2078	1.2524	1.2146	1.2332	1.2136	1.2050	1.2096
Price Indices								
GDP Deflator (2000=100) *3	51.4	69.3	84.2	92.2	100.0	112.7	115.3	110.9
Industry Selling Price Index (2000=100) *2	52.4	68.5	75.8	89.0	95.8	100.0	102.4	104.0
Consumer Price Index (2000=100) *2	41.2	58.9	73.2	81.8	89.2	100.0	102.0	104.2
Growth Rate (%) *3								
Real GDP	2.16	4.78	0.19	2.81	5.23	3.07	2.76	2.70
Population	1.30	0.93	1.50	0.83	0.89	0.99	1.04	1.00
Price								
Industry Selling Price Index	13.4	2.7	0.3	7.4	4.3	1.5	2.4	1.6
Consumer Price Index	10.2	4.0	4.8	2.2	2.7	2.2	2.0	2.1

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : CAD means Canadian Dollar, USD means United States Dollar  
                  : PPP means Purchasing Power Parity





## 3.4 Chile

## Energy Balance Table of Chile in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	161	-	593	-	-	-	-	-	-
2 Import	3,922	23	11,095	7,199	736	-	263	-	4,701
3 Export	-	-31	-	-1,218	-627	-85	-	-	-297
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-706	-50	-458	-441	-247	1	-52	-	16
6 Total Primary Energy Supply	3,377	-58	11,229	5,539	-137	-84	211	-	4,419
7 Transfers	-	-	-464	464	-	-	-	-	-
8 Total Transformation Sector	-3,001	510	-10,765	7,354	2,508	241	566	98	1,351
8.1 Main Activity Producer	-2,520	-	-	-3,007	-	-	-	-	-2,382
8.2 Autoproducers	-6	-	-	-127	-	-	-	-	-19
8.3 Gas Processing	-	-	-	-59	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-10,765	10,562	2,508	241	566	98	3,752
8.5 Coal Transformation	-475	510	-	-16	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-29	-126	-	-482	-	-156	-	-	-23
10. Discrepancy	-11	12	-0	2	-	-1	1	-1	-
11 Total Final Energy Consumption	336	338	-	12,877	2,371	-	778	97	5,748
12 Industry Sector	326	338	-	3,196	-	-	-	28	2,031
13 Transport Sector	-	-	-	8,200	2,371	-	778	2	3,572
14 Other Sector	10	-	-	1,318	-	-	-	66	145
14.1 Residential & Commercial	4	-	-	1,205	-	-	-	66	110
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	6	-	-	114	-	-	-	-	35
15 Non-energy	-	-	-	163	-	-	-	-	-

## Energy Balance Table of Chile in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	277	-	154	-	-	-	-	-	-
2 Import	3,168	-	11,483	4,291	606	-	103	-	2,480
3 Export	-	-6	-	-2,130	-822	-60	-	-	-389
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-2	4	-500	-776	-238	1	-106	15	-507
6 Total Primary Energy Supply	3,443	-2	11,137	1,386	-454	-59	-3	15	1,584
7 Transfers	-	-	-	-	-	-	-	-	-
8 Total Transformation Sector	-2,994	490	-11,683	11,105	2,788	250	732	64	3,918
8.1 Main Activity Producer	-2,483	-	-	-613	-	-	-	-	-116
8.2 Autoproducers	-8	-	-	-112	-	-	-	-	-17
8.3 Gas Processing	-	-	-	-3	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-11,683	11,832	2,788	250	732	64	4,051
8.5 Coal Transformation	-504	490	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-0	-72	-	-538	-	-190	-	-0	-1
10. Discrepancy	-0	0	546	-0	-0	0	-0	-	-0
11 Total Final Energy Consumption	448	417	-	11,952	2,333	0	729	79	5,502
12 Industry Sector	434	417	-	2,619	-	0	-	26	1,833
13 Transport Sector	0	-	-	8,088	2,333	0	729	1	3,535
14 Other Sector	15	-	-	1,245	-	0	-	51	134
14.1 Residential & Commercial	5	-	-	1,170	-	-	-	51	105
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	10	-	-	75	-	0	-	-	29
15 Non-energy	-	-	-	-	-	-	-	-	-

Energy Balance Table of Chile in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	1,083	1,958	-	-	4,735	-	-	8,529
104	1,118	-	-	277	2,339	-	-	-	-	140	-	24,718
-90	-120	-	-	-	-	-	-	-	-	-	-	-1,250
-	-	-	-	-	-	-	-	-	-	-	-	-
249	-421	0	-	11	-69	-	-	-	-	-	-	-1,724
263	578	0	-	288	3,353	1,958	-	-	4,735	140	-	30,273
-	464	-	-	-	-	-	-	-	-	-	-	0
2,145	375	174	-	-105	-911	-1,958	-	-	-493	5,032	-	-4,233
-183	-	-	-	-443	-882	-1,917	-	-	-24	4,649	-	-3,701
-96	-	-13	-	-	-37	-41	-	-	-470	383	-	-298
-	-59	-	-	-	8	-	-	-	-	-	-	-51
2,439	433	186	-	338	-	-	-	-	-	-	-	-202
-16	-	-	-	-	-	-	-	-	-	-	-	19
-	-	-	-	-	-	-	-	-	-	-	-	-
-43	-86	-174	-	-	-117	-	-	-	-	-611	-	-1,365
-	3	-0	-	0	0	-0	-	-	-0	0	-	4
2,365	1,335	0	-	183	2,326	-	-	-	4,241	4,561	-	24,679
794	322	0	-	21	226	-	-	-	1,452	3,080	-	8,619
1,472	5	-	-	-	23	-	-	-	-	35	-	8,258
99	1,008	-	-	-	545	-	-	-	2,789	1,445	-	6,108
25	1,004	-	-	-	533	-	-	-	2,789	1,425	-	5,956
-	-	-	-	-	-	-	-	-	-	-	-	-
74	5	-	-	-	11	-	-	-	-	21	-	152
-	-	-	-	163	1,532	-	-	-	-	-	-	1,695

Energy Balance Table of Chile in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	2,054	2,475	-	1	4,730	-	-	9,691
17	877	-	-	209	5,365	-	-	-	-	196	-	24,504
-708	-152	-	-	-	-	-	-	-	-	-	-	-2,136
-	-	-	-	-	-	-	-	-	-	-	-	-
152	-170	-0	-	78	-349	-	-	-	-	-	-	-1,622
-539	555	-0	-	287	7,071	2,475	-	1	4,730	196	-	30,436
-	-	-	-	-	-	-	-	-	-	-	-	-
2,671	637	308	-	-263	-5,375	-2,475	-	-1	-504	4,757	-	-6,680
-31	-	-	-	-466	-2,131	-2,429	-	-1	-17	4,447	-	-3,226
-76	-	-18	-	-	-124	-46	-	-	-487	311	-	-467
-	-3	-	-	-	-2,907	-	-	-	-	-	-	-2,910
2,778	641	326	-	203	-	-	-	-	-	-	-	149
-	-	-	-	-	-	-	-	-	-	-	-	-13
-	-	-	-	-	-213	-	-	-	-	-	-	-213
-35	-5	-307	-	-	-478	-	-	-	-	-599	-	-1,686
0	0	-0	-	0	103	-	-	-	-0	-0	-	649
2,097	1,188	-	-	24	1,321	-	-	-	4,226	4,355	-	22,720
554	182	-	-	24	732	-	-	-	1,305	2,936	-	8,442
1,487	3	-	-	-	36	-	-	-	-	28	-	8,152
56	1,004	-	-	-	553	-	-	-	2,921	1,392	-	6,126
12	1,001	-	-	-	529	-	-	-	2,921	1,376	-	6,001
-	-	-	-	-	-	-	-	-	-	-	-	-
44	2	-	-	-	24	-	-	-	-	16	-	125
-	-	-	-	-	-	-	-	-	-	-	-	-

## Major Energy Indicators of Chile

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	10,971	9,782	14,260	18,001	25,569	29,971	30,436	30,273
Indigenous Production	7,043	7,157	7,763	7,998	10,729	9,310	9,691	8,529
Import	4,125	2,792	7,117	10,790	18,688	23,149	24,504	24,718
Export	-	-	-158	-57	-2,483	-1,864	-2,136	-1,250
Final Energy Consumption	8,271	8,579	11,022	15,019	19,634	21,798	22,720	24,679
Industry	2,758	2,809	3,203	4,615	5,776	7,414	8,442	8,619
Transport	2,303	2,264	3,411	5,128	6,634	8,149	8,152	8,258
Residential & Commercial	2,427	2,643	3,430	4,125	5,320	5,847	6,001	5,956
Agriculture	626	696	796	880	1,398	-	-	-
Non-energy	154	163	182	271	454	2,478	-	1,695
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,393	1,217	2,597	2,209	3,099	2,947	3,441	3,319
Indigenous Production	743	939	1,451	690	243	354	277	161
Import	650	278	1,145	1,519	2,975	2,651	3,168	3,945
Export	-	-	-	-	-	-28	-6	-31
Transformation Sector	-600	-592	-1,776	-1,577	-2,133	-2,039	-2,504	-2,491
Power Generation	-439	-473	-1,649	-1,401	-2,082	-1,965	-2,491	-2,527
Final Energy Consumption	498	639	734	789	791	903	865	674
Industry	479	623	674	748	660	674	850	664
Transport	-	-	-	-	-	0	0	-
Residential & Commercial	17	12	18	7	3	4	5	4
Agriculture	-	-	41	33	128	-	-	-
Non-energy	-	-	-	-	-	213	-	-
<b>Crude Oil</b>								
Primary Energy Supply	4,919	3,786	6,307	8,035	10,001	11,299	11,137	11,229
Indigenous Production	1,568	1,664	882	436	282	175	154	593
Import	3,351	2,122	5,425	7,599	9,978	11,097	11,483	11,095
Export	-	-	-	-	-	-	-	-
Transformation Sector	-4,982	-3,834	-6,151	-7,957	-10,217	-11,037	-11,683	-10,765
Petroleum Refineries	-4,982	-3,834	-6,151	-7,957	-10,217	-11,037	-11,683	-10,765
<b>Petroleum Products</b>								
Primary Energy Supply	-73	226	-73	943	393	1,639	1,386	5,539
Import	124	392	547	1,672	1,958	3,935	4,291	7,199
Export	-	-	-158	-	-875	-1,836	-2,130	-1,218
Transformation Sector	4,387	3,680	6,004	7,632	10,567	10,249	11,105	7,354
Power Generation	-612	-292	-489	-524	-305	-936	-725	-3,134
Petroleum Refineries	5,180	4,083	6,654	8,399	10,874	11,186	11,832	10,562
Final Energy Consumption	4,960	4,571	6,134	8,887	10,617	11,436	11,952	12,877
Industry	1,652	1,439	1,525	1,991	2,121	2,061	2,619	3,196
Transport	2,288	2,247	3,390	5,103	6,607	8,096	8,088	8,200
Residential & Commercial	760	649	889	1,275	1,267	1,173	1,170	1,205
Agriculture	106	72	149	248	168	-	-	-
Non-energy	154	163	182	271	454	-	-	163
<b>Natural Gas</b>								
Primary Energy Supply	2,308	1,436	1,982	1,749	5,427	7,048	7,071	3,353
Indigenous Production	2,308	1,436	1,982	1,807	2,048	1,929	2,054	1,083
Import	-	-	-	-	3,674	5,280	5,365	2,339
Export	-	-	-	-57	-	-	-	-
Transformation Sector	-411	-483	-1,198	-1,134	-4,190	-4,957	-5,375	-911
Power Generation	-39	-56	-63	-418	-1,653	-2,712	-2,255	-919
Final Energy Consumption	218	235	268	355	1,104	1,277	1,321	2,326
Industry	68	61	63	109	729	758	732	226
Transport	-	-	6	9	8	31	36	23
Residential & Commercial	150	174	200	238	338	442	529	533
Agriculture	-	-	-	-	29	-	-	-
Non-energy	-	-	-	-	-	2,264	-	1,532
<b>Electricity</b>								
Power Generation	1,010	1,207	1,579	2,409	3,500	4,514	4,757	5,032
Thermal	379	317	808	827	1,854	2,259	2,282	3,074
Hydro	631	890	771	1,582	1,646	2,254	2,475	1,958
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	837	989	1,324	2,074	3,147	4,154	4,355	4,561
Industry	476	556	764	1,214	1,928	2,800	2,936	3,080
Transport	15	17	16	17	19	22	28	35
Residential & Commercial	271	329	433	630	919	1,322	1,376	1,425
Agriculture	76	88	112	214	280	-	-	-

## Major Economic Indicators of Chile

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	11.17	12.10	13.18	14.39	15.41	16.30	16.43	16.59
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	27.94	29.21	40.45	61.35	75.20	92.40	96.64	101.16
Real Term (Billions of 2000 Price and 2000 PPP)	53.08	55.48	76.83	116.53	142.84	175.52	183.57	192.17
Nominal (Billions of Current USD)	27.57	16.49	31.56	71.35	75.20	118.25	146.77	163.88
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	2,501	2,413	3,069	4,262	4,879	5,670	5,881	6,096
Real Term (2000 Price and 2000 PPP)	4,751	4,585	5,830	8,095	9,268	10,771	11,171	11,580
Nominal (Current USD)	2,468	1,362	2,395	4,957	4,879	7,257	8,932	9,875
Nominal GDP & its Components (Billions of Current CLP) *1								
Gross Domestic Product	1,075.32	2,651.94	9,622.32	28,309.22	40,575.32	66,192.60	77,830.58	85,621.09
Household Final Consumption Expenditure, etc.	760.09	1,775.62	5,886.61	17,270.34	25,897.22	38,546.47	42,009.31	46,833.91
General Government Final Consumption Expenditure	133.89	355.80	961.66	2,938.54	5,053.86	7,317.46	8,115.61	8,974.06
Gross Fixed Capital Formation	178.98	446.72	2,278.74	7,117.87	8,410.72	14,007.71	15,132.46	17,609.76
Stock Change	47.07	9.23	144.41	294.85	457.38	685.08	776.27	435.95
Exports of Goods and Services	245.39	746.45	3,270.24	8,295.39	12,820.21	27,355.08	35,514.02	40,310.19
Imports of Goods and Services	290.10	681.89	2,939.59	7,672.55	12,064.06	21,719.20	23,895.84	28,524.05
Real GDP & its Components (Billions of 1986 CLP) *1								
Gross Domestic Product	17,318.50	18,101.36	25,067.26	38,019.30	46,602.20	57,262.64	59,890.97	62,694.08
Household Final Consumption Expenditure, etc.	12,047.04	10,938.10	14,853.03	23,482.62	29,260.37	36,965.16	39,371.65	42,420.23
General Government Final Consumption Expenditure	3,858.20	3,710.80	3,960.60	4,798.35	5,655.05	6,903.25	7,305.48	7,732.41
Gross Fixed Capital Formation	2,826.82	2,321.70	4,402.88	8,431.94	9,205.58	14,044.56	14,455.08	16,173.87
Stock Change	116.68	33.29	140.16	387.14	517.92	272.02	758.22	416.26
Exports of Goods and Services	3,667.88	4,020.07	6,646.52	10,920.20	16,108.37	22,083.52	23,289.90	25,111.43
Imports of Goods and Services	4,330.33	2,699.71	5,156.14	10,555.83	14,197.24	23,005.87	25,431.36	29,060.73
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	5.4	5.9	6.5	4.8	4.5	5.1	5.0	4.9
Industry	41.5	40.8	38.9	36.7	35.3	34.0	33.6	33.0
Services, etc.	59.9	55.0	53.8	54.5	55.4	55.6	56.2	56.5
Manufacturing Production Index (2000=100) *2	42.8	41.9	55.2	71.5	80.8	100.0	103.2	107.5
External Trade (Billions of Current USD) *1								
Exports, f.o.b	4.705	3.804	8.372	16.024	19.210	41.267	58.486	67.644
Imports, c.i.f.	5.797	3.072	7.742	15.900	18.507	32.735	38.405	47.125
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-0.764	0.884	1.284	1.381	2.119	10.775	22.780	23.635
Current Account	-1.971	-1.413	-0.485	-1.350	-0.898	1.449	7.154	7.189
Overall Balance	1.321	-2.877	2.323	1.139	0.317	1.711	1.998	-3.214
Foreign Exchange Rate (CLP/USD) *1	39.0000	160.8600	304.9033	396.7733	539.5875	559.7675	530.2750	522.4642
Purchasing Power Parity (CLP/International Dollar) *1	37.5163	68.6113	153.4653	263.7874	284.0580	333.6903	363.6794	372.3043
Price Indices								
GDP Deflator (1986=100) *3	6.2	14.7	38.4	74.5	87.1	115.6	130.0	136.6
Industry Selling Price Index (2000=100) *2	5.3	16.1	34.2	58.5	75.4	100.0	107.0	114.1
Consumer Price Index (2000=100) *2	5.6	14.6	35.8	68.5	88.0	100.0	103.4	107.9
Growth Rate (%) *3								
Real GDP	8.15	7.12	3.70	10.63	4.49	5.56	4.59	4.68
Population	1.45	1.67	1.78	1.65	1.24	1.06	0.84	0.99
Price								
Home & Import Goods Price Index (2000=100)	39.6	43.4	21.8	7.6	11.4	5.4	7.0	6.7
Consumer Price Index	35.1	29.5	26.0	8.2	3.8	3.1	3.4	4.4

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : CLP means Chilean Peso, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.5 China

Energy Balance Table of People's Republic of China in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	1,322,584	-	186,318	-	-	-	-	-	-
<b>2 Import</b>	30,633	0	163,160	42,412	-	980	5,150	250	1,654
<b>3 Export</b>	-27,908	-10,435	-3,884	-18,092	-4,662	-1,596	-4,734	-0	-674
<b>4 International Marine Bunkers</b>	-	-	-	-2,793	-	-	-	-	-277
<b>5 Stock Changes</b>	-5,369	-4,675	-5,244	1,082	431	-	-7	-3	558
<b>6 Total Primary Energy Supply</b>	1,319,940	-15,110	340,351	22,609	-4,231	-616	410	247	1,261
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-956,654	105,124	-328,491	306,020	60,150	20,159	11,886	795	123,703
<b>8.1 Main Activity Producer</b>	-660,037	-943	-	-	-	-	-	-	-
<b>8.2 Autoproducers</b>	-61,982	-9,723	-165	-13,031	-1	-	-	-	-2,360
<b>8.3 Gas Processing</b>	-8,038	-1,823	-	-50	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-328,326	319,100	60,152	20,159	11,886	795	126,063
<b>8.5 Coal Transformation</b>	-226,598	117,613	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-46,849	-3,282	-7,693	-6,170	-799	-	-	-32	-2,909
<b>10. Discrepancy</b>	-7,259	-3,440	-35	-434	392	-0	12	-175	-36
<b>11 Total Final Energy Consumption</b>	309,177	83,292	4,132	322,024	55,512	19,543	12,307	835	122,019
<b>12 Industry Sector</b>	215,504	61,729	2,836	84,896	6,938	19,543	-	379	16,417
<b>13 Transport Sector</b>	4,500	4	-	119,927	27,963	-	12,038	100	69,185
<b>14 Other Sector</b>	68,352	7,417	-	78,852	20,421	-	270	302	36,129
<b>14.1 Residential &amp; Commercial</b>	52,376	6,680	-	37,724	8,097	-	-	251	8,254
<b>14.2 Agriculture</b>	11,860	556	-	21,765	2,542	-	-	10	19,128
<b>14.3 Other</b>	4,116	181	-	19,363	9,782	-	270	41	8,746
<b>15 Non-energy</b>	20,822	14,142	1,296	38,349	190	-	-	54	288

Energy Balance Table of People's Republic of China in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	1,239,304	-	184,766	-	-	-	-	-	-
<b>2 Import</b>	23,048	0	145,175	44,985	-	587	5,578	200	719
<b>3 Export</b>	-33,144	-9,864	-6,337	-15,260	-3,520	-1,419	-3,781	-66	-791
<b>4 International Marine Bunkers</b>	-	-	-	-2,343	-	-	-	-	-255
<b>5 Stock Changes</b>	5,338	-2,256	-1,111	-9	-75	-	-45	-7	975
<b>6 Total Primary Energy Supply</b>	1,234,546	-12,120	322,492	27,372	-3,595	-832	1,752	126	648
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-881,774	90,239	-310,698	283,070	56,177	19,437	10,031	1,457	116,787
<b>8.1 Main Activity Producer</b>	-601,591	-879	-	-	-	-	-	-	-
<b>8.2 Autoproducers</b>	-55,615	-11,164	-238	-17,577	-10	-	-	-	-3,190
<b>8.3 Gas Processing</b>	-7,260	-1,605	-	-134	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-310,460	300,781	56,187	19,437	10,031	1,457	119,976
<b>8.5 Coal Transformation</b>	-217,308	103,888	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-73,373	-3,073	-7,652	-6,540	-685	-	-	-35	-3,215
<b>10. Discrepancy</b>	23,477	-2,336	-40	49	885	-0	254	-355	-2
<b>11 Total Final Energy Consumption</b>	302,877	72,710	4,103	303,951	52,781	18,605	12,037	1,193	114,218
<b>12 Industry Sector</b>	208,325	52,258	2,816	85,486	5,814	18,605	-	404	17,658
<b>13 Transport Sector</b>	4,758	6	-	106,483	27,549	-	10,265	92	58,519
<b>14 Other Sector</b>	69,868	7,651	-	79,024	19,262	-	1,772	639	37,723
<b>14.1 Residential &amp; Commercial</b>	54,179	6,903	-	33,335	6,864	-	-	273	7,144
<b>14.2 Agriculture</b>	11,717	541	-	22,615	2,468	-	-	16	20,043
<b>14.3 Other</b>	3,972	207	-	23,073	9,930	-	1,772	350	10,536
<b>15 Non-energy</b>	19,926	12,794	1,287	32,959	155	-	-	58	318



Energy Balance Table of People's Republic of China in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	64,462	41,733	16,191	-	6,429	-	-	1,637,717	
24,171	4,865	-	-	5,341	3,743	-	-	-	-	366	-	240,314	
-3,797	-406	-	-	-2,223	-2,421	-	-	-	-	-1,253	-	-63,992	
-2,516	-	-	-	-	-	-	-	-	-	-	-	-2,793	
149	-46	-	-	-	-	-	-	-	-	-	-	-14,206	
18,007	4,413	-	-	3,118	65,784	41,733	16,191	-	6,429	-887	-	1,797,040	
-	-	-	-	-	-	-	-	-	-	-	-	-	
12,652	23,275	9,521	-	43,879	-1,961	-41,733	-16,191	-	-3,462	282,214	62,199	-592,935	
-	-	-	-	-	-	-41,733	-16,191	-	-3,462	264,082	34,718	-423,565	
-6,971	-62	-1,796	-	-1,841	-9,357	-	-	-	-	18,131	27,480	-48,646	
-50	-	-	-	-	7,791	-	-	-	-	-	-	-2,119	
19,672	23,337	11,316	-	45,720	-	-	-	-	-	-	-	-9,226	
-	-	-	-	-	-	-	-	-	-	-	-	-108,985	
-	-	-	-	-	-394	-	-	-	-	-	-	-394	
-749	-982	-386	-	-313	-9,661	-	-	-	-39	-51,319	-10,114	-135,127	
-809	184	-2	-	-0	-916	-	-	-	-2	-58	-1,598	-13,741	
29,100	26,892	9,132	-	46,684	53,248	-	-	-	2,926	229,950	50,486	1,055,236	
17,571	4,261	9,075	-	10,713	28,122	-	-	-	2,926	162,640	34,432	593,085	
9,994	647	-	-	-	979	-	-	-	-	4,574	-	129,984	
376	21,354	-	-	-	20,245	-	-	-	-	62,735	16,055	253,655	
248	20,874	-	-	-	18,747	-	-	-	-	39,152	14,528	169,206	
10	75	-	-	-	-	-	-	-	-	8,419	28	42,628	
118	406	-	-	-	1,498	-	-	-	-	15,164	1,499	41,821	
1,159	629	57	-	35,972	3,903	-	-	-	-	-	-	78,512	

Energy Balance Table of People's Republic of China in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	54,513	37,478	14,292	-	5,673	-	-	1,536,025	
27,993	6,427	-	-	3,482	88	-	-	-	-	463	-	213,760	
-2,581	-181	-	-	-2,922	-2,698	-	-	-	-	-1,055	-	-68,359	
-2,088	-	-	-	-	-	-	-	-	-	-	-	-2,343	
-841	-16	-	-	-	-	-	-	-	-	-	-	1,961	
22,484	6,230	-	-	560	51,903	37,478	14,292	-	5,673	-592	-	1,681,044	
-	-	-	-	-	-	-	-	-	-	-	-	-	
6,840	20,879	9,020	-	42,443	2,374	-37,478	-14,292	-	-2,698	246,452	59,247	-565,556	
-	-	-	-	-	-	-37,478	-14,292	-	-2,698	229,925	33,135	-393,877	
-10,872	-65	-1,801	-	-1,639	-5,482	-	-	-	-	16,527	26,112	-47,437	
-134	-	-	-	-	8,378	-	-	-	-	-	-	-620	
17,847	20,944	10,820	-	44,082	-	-	-	-	-	-	-	-9,679	
-	-	-	-	-	-	-	-	-	-	-	-	-113,420	
-	-	-	-	-	-522	-	-	-	-	-	-	-522	
-750	-1,095	-492	-	-268	-8,380	-	-	-	-46	-46,371	-12,677	-158,113	
-34	-681	-18	-	-0	-835	-	-	-	-3	-71	-1,349	18,892	
28,540	25,332	8,509	-	42,735	45,062	-	-	-	2,926	199,419	45,221	976,268	
17,607	4,722	8,455	-	12,222	24,399	-	-	-	2,926	138,215	29,697	544,123	
9,419	638	-	-	-	757	-	-	-	-	4,019	-	116,023	
353	19,274	-	-	-	16,487	-	-	-	-	57,184	15,524	245,737	
214	18,841	-	-	-	15,298	-	-	-	-	35,250	14,254	159,219	
7	80	-	-	-	-	-	-	-	-	8,145	21	43,039	
131	353	-	-	-	1,189	-	-	-	-	13,789	1,249	43,479	
1,161	699	54	-	30,514	3,420	-	-	-	-	-	-	70,385	

## Major Energy Indicators of People's Republic of China

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	421,007	527,114	654,004	857,999	905,175	1,542,289	1,681,044	1,797,040
Indigenous Production	436,251	583,010	705,811	871,184	865,531	1,426,025	1,536,025	1,637,717
Import	1,824	2,073	8,436	35,416	96,856	184,280	213,760	240,314
Export	-21,406	-40,408	-38,922	-44,273	-64,437	-46,884	-68,359	-63,992
Final Energy Consumption	318,167	409,434	489,928	660,681	634,676	906,568	976,268	1,055,236
Industry	217,327	271,662	329,825	409,970	379,343	497,451	544,123	593,085
Transport	14,999	24,253	28,776	36,370	60,078	107,889	116,023	129,984
Residential & Commercial	75,698	104,148	118,373	107,031	95,991	153,385	159,219	169,206
Agriculture	10,144	9,371	12,954	28,403	30,009	40,163	43,039	42,628
Non-energy	-	-	-	44,818	40,315	67,871	70,385	78,512
<b>Coal, Coal Products</b>								
Primary Energy Supply	312,823	413,127	512,155	659,176	631,243	1,122,099	1,222,426	1,304,830
Indigenous Production	310,081	436,150	539,952	680,379	649,618	1,143,269	1,239,304	1,322,584
Import	995	1,168	877	818	1,496	15,686	23,048	30,634
Export	-3,344	-4,136	-7,785	-20,334	-40,130	-18,528	-43,008	-38,343
Transformation Sector	-67,719	-86,321	-160,505	-258,749	-332,442	-676,278	-791,534	-851,530
Power Generation	-57,524	-74,157	-119,784	-233,122	-327,372	-583,983	-669,250	-732,685
Final Energy Consumption	225,420	298,564	338,239	425,458	296,805	367,076	375,586	392,470
Industry	146,103	191,854	224,832	300,542	216,937	248,261	260,583	277,234
Transport	10,112	12,095	11,089	7,052	5,540	5,470	4,764	4,504
Residential & Commercial	69,205	94,615	102,319	81,950	46,771	67,129	61,082	59,056
Agriculture	-	-	-	11,201	8,919	11,788	12,258	12,416
Non-energy	-	-	-	14,014	15,277	30,450	32,721	34,964
<b>Crude Oil</b>								
Primary Energy Supply	92,231	95,167	117,828	147,952	213,834	299,315	322,492	340,351
Indigenous Production	105,948	124,898	138,448	150,047	163,003	181,353	184,766	186,318
Import	366	-	2,926	17,090	70,267	126,817	145,175	163,160
Export	-13,309	-30,031	-24,014	-18,227	-10,306	-8,067	-6,337	-3,884
Transformation Sector	-84,432	-88,686	-110,969	-144,197	-204,047	-290,621	-310,698	-328,491
Petroleum Refineries	-78,692	-85,891	-109,722	-143,536	-203,057	-290,405	-310,460	-328,326
<b>Petroleum Products</b>								
Primary Energy Supply	-4,268	-3,142	-3,389	10,576	10,828	22,758	27,372	22,609
Import	463	906	4,634	17,452	24,960	41,484	44,985	42,412
Export	-4,753	-6,241	-7,123	-5,194	-10,229	-16,710	-15,260	-18,092
Transformation Sector	62,976	63,711	96,269	123,550	182,654	264,109	283,070	306,020
Power Generation	-14,928	-11,481	-11,140	-17,032	-15,203	-19,899	-17,577	-13,031
Petroleum Refineries	77,904	75,192	107,409	140,582	198,116	284,152	300,781	319,100
Final Energy Consumption	49,729	61,230	80,728	121,892	187,223	280,834	303,951	322,024
Industry	32,880	37,927	47,912	30,019	62,920	77,324	85,486	84,896
Transport	4,638	11,572	16,676	27,687	51,830	97,855	106,483	119,927
Residential & Commercial	4,524	5,249	7,070	8,653	20,292	30,270	33,335	37,724
Agriculture	7,687	6,483	9,070	12,185	15,287	21,175	22,615	21,765
Non-energy	-	-	-	24,245	17,566	32,856	32,959	38,349
<b>Natural Gas</b>								
Primary Energy Supply	13,285	12,038	14,242	16,709	22,401	44,665	51,903	65,784
Indigenous Production	13,285	12,038	14,242	16,709	25,323	47,429	54,513	64,462
Import	-	-	-	-	-	-	88	3,743
Export	-	-	-	-	-2,922	-2,764	-2,698	-2,421
Transformation Sector	-223	405	515	13,078	6,691	2,492	2,374	-1,961
Power Generation	-223	-251	-680	-1,823	-4,855	-5,092	-5,482	-9,357
Final Energy Consumption	12,158	11,059	13,205	27,667	24,087	38,454	45,062	53,248
Industry	11,917	10,244	11,084	20,919	14,147	20,241	24,399	28,122
Transport	9	9	47	62	93	863	757	979
Residential & Commercial	232	806	2,074	3,015	5,187	12,328	15,298	18,747
Agriculture	-	-	-	2	-	-	-	-
Non-energy	-	-	-	3,501	4,577	3,420	3,420	3,903
<b>Electricity</b>								
Power Generation	27,447	37,376	53,440	86,695	116,428	214,823	246,452	282,214
Thermal	22,060	28,967	42,540	66,958	92,930	166,845	194,683	224,290
Hydro	5,387	8,408	10,900	16,395	19,134	34,143	37,478	41,733
Nuclear	-	-	-	3,342	4,363	13,835	14,292	16,191
Final Energy Consumption	24,718	34,053	52,150	60,634	90,621	169,807	199,419	229,950
Industry	20,284	27,110	40,392	40,300	59,109	116,274	138,215	162,640
Transport	241	577	964	1,568	2,419	3,701	4,019	4,574
Residential & Commercial	1,736	3,478	6,911	10,367	17,771	30,763	35,250	39,152
Agriculture	2,457	2,888	3,884	5,011	5,789	7,181	8,145	8,419

## Major Economic Indicators of People's Republic of China

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	981.24	1,051.04	1,135.19	1,204.86	1,262.65	1,303.72	1,311.02	1,318.31
Gross Domestic Product *4								
Real Term (Billions of 2000 Price and 2000 USD)	182.94	304.46	444.59	792.78	1,198.47	1,893.34	2,112.96	2,387.65
Real Term (Billions of 2000 Price and 2000 PPP)	454.34	756.15	1,104.19	1,968.93	2,976.48	4,702.25	5,247.71	5,929.91
Nominal (Billions of Current USD)	303.36	307.02	390.28	727.94	1,198.47	2,235.91	2,657.87	3,382.25
GDP per Capita *4								
Real Term (2000 Price and 2000 USD)	186	290	392	658	949	1,452	1,612	1,811
Real Term (2000 Price and 2000 PPP)	463	719	973	1,634	2,357	3,607	4,003	4,498
Nominal (Current USD)	309	292	344	604	949	1,715	2,027	2,566
Nominal GDP & its Components (Billions of Current CNY) *1								
Gross Domestic Product	454.56	901.60	1,866.78	6,079.37	9,921.50	18,321.75	21,192.35	25,730.60
Household Final Consumption Expenditure, etc.	233.12	468.74	945.09	2,836.97	4,585.46	7,121.75	8,047.69	9,331.72
General Government Final Consumption Expenditure	67.67	129.89	263.96	837.85	1,566.14	2,660.52	3,011.84	3,512.74
Gross Fixed Capital Formation	132.24	267.20	482.78	2,088.50	3,384.44	7,730.48	9,015.08	10,522.13
Stock Change	27.73	78.55	191.92	458.51	99.84	334.15	425.12	619.61
Exports of Goods and Services	48.40	89.64	355.49	1,402.70	2,314.32	6,857.71	8,465.21	10,944.08
Imports of Goods and Services	50.06	126.69	290.46	1,268.32	2,075.29	5,835.08	6,799.47	8,436.97
Real GDP & its Components (Billions of 1990 CNY) *1								
Gross Domestic Product	1,514.47	2,520.46	3,680.58	6,563.03	9,921.50	15,673.99	17,492.18	19,766.16
Household Final Consumption Expenditure, etc.	827.03	1,480.41	1,987.14	3,270.84	4,585.46	6,310.45	6,913.60	7,528.11
General Government Final Consumption Expenditure	239.61	409.44	552.82	963.99	1,566.14	2,357.44	2,587.41	2,833.81
Gross Fixed Capital Formation	435.37	734.62	891.59	2,244.74	3,384.44	6,333.49	7,173.17	7,888.71
Stock Change	90.73	215.10	352.83	490.94	99.84	273.77	338.25	464.54
Exports of Goods and Services	356.34	489.85	618.52	1,176.68	2,314.32	6,641.43	8,187.92	9,821.05
Imports of Goods and Services	226.28	482.93	456.97	1,173.39	2,075.29	4,990.63	5,705.56	6,500.46
Sectional Shares of Real GDP (%) *4								
Agriculture, Fishery and Forest	37.3	33.3	27.9	19.2	15.1	11.6	10.9	10.0
Industry	34.1	33.0	34.8	43.5	45.9	48.4	49.0	49.7
Services, etc.	28.6	33.7	37.3	37.3	39.0	40.1	40.1	40.3
Industrial Production Index (2000=100) *3*4	10.9	17.5	27.3	61.5	100.0	167.6	189.2	214.8
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	18,099	27,350	62,091	148,780	249,203	761,953	968,969	1,218,635
Imports, c.i.f.	19,941	42,252	53,345	132,084	225,094	659,953	791,461	955,950
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	-13,123	9,165	18,050	34,474	134,189	217,746	315,381
Current Account	N.A.	-11,417	11,997	1,618	20,518	160,818	253,268	371,833
Overall Balance	N.A.	-2,440	12,047	22,469	10,693	207,342	246,855	461,691
Foreign Exchange Rate (CNY/USD) *1	1.4984	2.9367	4.7832	8.3514	8.2785	8.1943	7.9734	7.6075
Purchasing Power Parity (CNY/International Dollar) *1	1.8529	1.7116	2.0717	3.3528	3.3333	3.4476	3.4641	3.6257
Price Indices								
GDP Deflator (1990=100) *4	30.0	35.8	50.7	92.6	100.0	116.9	121.2	130.2
Wholesale Price Index (1995=100) *4	29.6	32.6	51.8	100.0	98.7	108.5	111.8	115.2
Consumer Price Index (1995=100) *4	30.4	36.0	58.3	100.0	99.5	100.9	101.9	105.8
Growth Rate (%)								
Real GDP *4	7.80	13.50	3.80	10.90	8.40	10.40	11.60	13.00
Population *4	1.26	1.37	1.48	1.09	0.71	0.58	0.56	0.56
Price *4								
Wholesale Price Index	0.5	8.7	4.1	14.9	2.8	4.9	3.0	3.1
Consumer Price Index	6.0	8.8	2.1	14.8	-1.5	0.8	1.0	3.8

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : "China Statistics Yearbook", China Statistical Publishing House  
                  \*4 : Calculated from \*1, \*2 and \*3 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : CNY means Yuan Renminbi, USD means United States Dollar



## 3.6 Hong Kong, China

Energy Balance Table of Hong Kong, China in 2007

	1 Coal	2 Coal Products	3 Crude Oil & NGL	4 Petroleum Products	4.1 Mogas	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Diesel Oil
<b>1 Indigenous Production</b>	-	-	-	-	-	-	-	-	-
<b>2 Import</b>	7,727	-	-	17,666	404	292	5,232	22	3,872
<b>3 Export</b>	-2	-	-	-960	-37	-	-150	-	-127
<b>4 International Marine Bunkers</b>	-	-	-	-8,355	-	-	-	-	-2,127
<b>5 Stock Changes</b>	-245	-	-	-619	-11	70	-343	-	-100
<b>6 Total Primary Energy Supply</b>	7,480	-	-	7,732	356	362	4,739	22	1,518
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-7,478	-	-	-393	-	-363	-	-	-6
<b>8.1 Main Activity Producer</b>	-7,478	-	-	-30	-	-	-	-	-6
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-363	-	-363	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-	-	-	-	-	-	-
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-0	-	-	-597	100	0	-926	-0	229
<b>11 Total Final Energy Consumption</b>	2	-	-	6,742	456	-	3,813	22	1,741
<b>12 Industry Sector</b>	2	-	-	319	-	-	-	-	72
<b>13 Transport Sector</b>	-	-	-	6,178	456	-	3,813	-	1,573
<b>14 Other Sector</b>	-	-	-	245	-	-	-	22	96
<b>14.1 Residential &amp; Commercial</b>	-	-	-	245	-	-	-	22	96
<b>14.2 Agriculture</b>	-	-	-	-	-	-	-	-	-
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	-	-	-	-	-	-

Energy Balance Table of Hong Kong, China in 2006

	1 Coal	2 Coal Products	3 Crude Oil & NGL	4 Petroleum Products	4.1 Mogas	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Diesel Oil
<b>1 Indigenous Production</b>	-	-	-	-	-	-	-	-	-
<b>2 Import</b>	7,182	-	-	16,436	363	533	4,744	24	3,818
<b>3 Export</b>	-0	-	-	-1,187	-33	-	-227	-	-100
<b>4 International Marine Bunkers</b>	-	-	-	-7,329	-	-	-	-	-2,281
<b>5 Stock Changes</b>	-331	-	-	-188	5	57	105	-	129
<b>6 Total Primary Energy Supply</b>	6,851	-	-	7,731	336	590	4,623	24	1,567
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-6,851	-	-	-627	-	-590	-	-	-7
<b>8.1 Main Activity Producer</b>	-6,851	-	-	-37	-	-	-	-	-7
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-590	-	-590	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-	-	-	-	-	-	-
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-0	-	-	-554	94	0	-858	-	209
<b>11 Total Final Energy Consumption</b>	0	-	-	6,550	430	-	3,765	24	1,769
<b>12 Industry Sector</b>	0	-	-	191	-	-	-	-	88
<b>13 Transport Sector</b>	-	-	-	6,116	430	-	3,765	-	1,590
<b>14 Other Sector</b>	-	-	-	243	-	-	-	24	91
<b>14.1 Residential &amp; Commercial</b>	-	-	-	243	-	-	-	24	91
<b>14.2 Agriculture</b>	-	-	-	-	-	-	-	-	-
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	-	-	-	-	-	-

Energy Balance Table of Hong Kong, China in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	-	-	-	-	98	-	-	98	
7,425	419	-	-	-	2,041	-	-	-	-	942	-	28,377	
-646	-	-	-	-	-	-	-	-	-	-347	-	-1,309	
-6,228	-	-	-	-	-	-	-	-	-	-	-	-8,355	
-280	44	-	-	-	-172	-	-	-	-	-	-	-1,036	
272	464	-	-	-	1,870	-	-	-	98	595	-	17,776	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-24	-	-	-	-	-827	-	-	-	-98	3,937	-	-4,858	
-24	-	-	-	-	-1,224	-	-	-	-	3,839	-	-4,893	
-	-	-	-	-	-	-	-	-	-98	98	-	0	
-	-	-	-	-	397	-	-	-	-	-	-	35	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-921	-	-921	
-0	-0	-	-	-	-397	-	-	-	-	-89	-	-1,083	
248	464	-	-	-	646	-	-	-	-	3,523	-	10,914	
248	-	-	-	-	21	-	-	-	-	313	-	656	
-	335	-	-	-	-	-	-	-	-	60	-	6,237	
-	128	-	-	-	625	-	-	-	-	3,150	-	4,020	
-	128	-	-	-	625	-	-	-	-	3,150	-	4,020	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	

Energy Balance Table of Hong Kong, China in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	-	-	-	-	93	-	-	93	
6,484	469	-	-	-	2,185	-	-	-	-	937	-	26,740	
-827	-0	-	-	-	-	-	-	-	-	-389	-	-1,577	
-5,048	-	-	-	-	-	-	-	-	-	-	-	-7,329	
-475	-10	-	-	-	-21	-	-	-	-	-	-	-540	
134	459	-	-	-	2,164	-	-	-	93	548	-	17,388	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-30	-	-	-	-	-1,583	-	-	-	-46	3,806	-	-5,301	
-30	-	-	-	-	-2,164	-	-	-	-	3,806	-	-5,246	
-	-	-	-	-	-	-	-	-	-46	-	-	-46	
-	-	-	-	-	581	-	-	-	-	-	-	-8	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-885	-	-885	
0	-	-	-	-	0	-	-	-	-46	-0	-	-601	
104	459	-	-	-	581	-	-	-	-	3,469	-	10,600	
104	-	-	-	-	19	-	-	-	-	335	-	546	
-	330	-	-	-	-	-	-	-	-	58	-	6,174	
-	128	-	-	-	562	-	-	-	-	3,076	-	3,880	
-	128	-	-	-	562	-	-	-	-	3,076	-	3,880	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	

## Major Energy Indicators of Hong Kong, China

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	5,293	7,011	10,643	13,250	15,094	17,762	17,388	17,776
Indigenous Production	-	-	-	-	-	81	93	98
Import	6,195	8,021	12,918	22,159	19,786	25,210	26,740	28,377
Export	-199	-294	-2,123	-7,837	-1,557	-1,763	-1,577	-1,309
Final Energy Consumption	3,464	4,330	6,689	9,275	11,204	10,364	10,600	10,914
Industry	1,040	1,335	1,516	1,373	1,714	574	546	656
Transport	1,512	1,658	3,136	5,132	6,088	6,001	6,174	6,237
Residential & Commercial	892	1,321	2,025	2,754	3,389	3,660	3,880	4,020
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Coal, Coal Products</b>								
Primary Energy Supply	20	3,232	6,008	5,751	4,125	6,870	6,851	7,480
Indigenous Production	-	-	-	-	-	-	-	-
Import	21	3,324	5,362	5,467	3,658	6,826	7,182	7,727
Export	-1	-1	-1	-1	-24	-0	-0	-2
Transformation Sector	-	-3,216	-5,996	-5,742	-4,121	-6,869	-6,851	-7,478
Power Generation	-	-3,216	-5,996	-5,742	-4,121	-6,869	-6,851	-7,478
Final Energy Consumption	20	16	12	9	4	1	0	2
Industry	-	-	-	-	-	1	0	2
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	-	-	-	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-	-	-	-	-	-
<b>Petroleum Products</b>								
Primary Energy Supply	5,299	3,869	4,790	6,961	8,186	8,219	7,731	7,732
Import	6,174	4,697	7,556	16,022	13,245	15,405	16,436	17,666
Export	-172	-203	-1,967	-7,708	-1,431	-1,377	-1,187	-960
Transformation Sector	-2,871	-1,097	-489	-694	-684	-756	-627	-393
Power Generation	-2,789	-908	-126	-169	-37	-38	-37	-30
Petroleum Refineries	-	-	-	-	-	-	-	-
Final Energy Consumption	2,430	2,773	4,304	6,227	7,518	6,332	6,550	6,742
Industry	674	880	908	869	1,269	204	191	319
Transport	1,512	1,658	3,136	5,132	6,088	5,878	6,116	6,178
Residential & Commercial	243	235	260	225	161	122	243	245
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Natural Gas</b>								
Primary Energy Supply	-	-	-	16	2,007	2,033	2,164	1,870
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	22	2,007	2,033	2,185	2,041
Export	-	-	-	-	-	-	-	-
Transformation Sector	76	172	324	456	-1,447	-1,447	-1,583	-827
Power Generation	-	-	-	-16	-2,007	-2,033	-2,164	-1,224
Final Energy Consumption	76	172	324	472	560	586	581	646
Industry	5	6	13	21	21	19	19	21
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	71	166	311	451	539	567	562	625
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	1,088	1,654	2,488	2,400	2,694	3,307	3,806	3,937
Thermal	1,088	1,654	2,488	2,400	2,694	3,307	3,806	3,937
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	939	1,370	2,049	2,567	3,121	3,444	3,469	3,523
Industry	361	450	596	483	424	350	335	313
Transport	-	-	-	-	-	123	58	60
Residential & Commercial	578	920	1,454	2,077	2,689	2,971	3,076	3,150
Agriculture	-	-	-	-	-	-	-	-



## Major Economic Indicators of Hong Kong, China

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	5.06	5.46	5.70	6.16	6.67	6.81	6.86	6.93
Gross Domestic Product *4								
Real Term (Billions of 2000 Price and 2000 USD)	60.15	79.36	115.16	148.51	169.12	207.09	221.62	235.76
Real Term (Billions of 2000 Price and 2000 PPP)	62.47	82.42	119.61	154.24	175.65	215.08	230.18	244.87
Nominal (Billions of Current USD)	28.82	35.53	76.89	144.23	169.12	177.77	189.93	207.07
GDP per Capita *4								
Real Term (2000 Price and 2000 USD)	11,880	14,545	20,188	24,123	25,375	30,395	32,320	34,041
Real Term (2000 Price and 2000 PPP)	12,339	15,106	20,968	25,055	26,354	31,568	33,568	35,355
Nominal (Current USD)	5,692	6,512	13,479	23,429	25,375	26,092	27,699	29,898
Nominal GDP & its Components (Billions of Current HKD) *1								
Gross Domestic Product	143.40	276.82	598.95	1,115.74	1,317.65	1,382.59	1,475.36	1,615.43
Household Final Consumption Expenditure, etc.	85.41	169.39	342.17	691.71	777.14	804.94	863.59	972.03
General Government Final Consumption Expenditure	8.71	19.75	43.14	93.62	120.17	121.44	123.03	130.40
Gross Fixed Capital Formation	46.23	58.07	156.16	334.36	347.38	289.17	322.69	325.35
Stock Change	3.75	1.47	5.73	45.66	14.40	-4.76	-2.13	12.84
Exports of Goods and Services	127.48	297.72	782.38	1,597.77	1,887.70	2,747.14	3,032.41	3,359.58
Imports of Goods and Services	128.17	269.57	730.62	1,647.38	1,829.14	2,575.33	2,864.24	3,184.76
Real GDP & its Components (Billions of 2000 HKD) *1								
Gross Domestic Product	412.15	543.75	789.09	1,017.55	1,158.81	1,418.94	1,518.54	1,615.43
Household Final Consumption Expenditure, etc.	260.77	351.09	507.73	701.41	770.33	845.46	895.55	972.03
General Government Final Consumption Expenditure	42.28	61.66	78.57	104.51	117.14	126.28	126.63	130.40
Gross Fixed Capital Formation	114.47	120.12	176.69	266.97	278.84	293.61	314.53	325.35
Stock Change	12.90	2.53	7.10	46.10	14.80	-4.82	-1.43	12.84
Exports of Goods and Services	238.22	375.31	785.22	1,427.51	1,835.25	2,833.47	3,100.94	3,359.58
Imports of Goods and Services	229.56	343.95	755.52	1,517.80	1,847.04	2,674.52	2,917.73	3,184.76
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	N.A.	N.A.	N.A.	N.A.	0.1	0.1	0.1	0.1
Industry	N.A.	N.A.	N.A.	N.A.	12.5	8.7	7.9	7.4
Services, etc.	N.A.	N.A.	N.A.	N.A.	93.5	85.9	88.6	86.7
Manufacturing Production (2000=100) *2	N.A.	102.2	145.1	149.0	121.1	100.0	102.2	100.8
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	20.323	30.077	82.390	173.871	202.683	292.119	322.669	349.386
Imports, c.i.f.	22.994	31.195	84.725	196.072	214.042	300.160	335.754	370.132
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	N.A.	N.A.	N.A.	-8.193	-7.627	-14.033	-19.701
Current Account	N.A.	N.A.	N.A.	N.A.	6.993	20.181	22.928	25.532
Overall Balance	N.A.	N.A.	N.A.	N.A.	10.044	1.378	6.016	14.704
Foreign Exchange Rate (HKD/USD) *1	4.9761	7.7908	7.7898	7.7358	7.7912	7.7773	7.7678	7.8014
Purchasing Power Parity (HKD/International Dollar) *1	4.2511	4.8211	6.1363	7.8549	7.5015	5.6878	5.4980	5.5125
Price Indices								
GDP Deflator (2007=100) *4	34.8	50.9	75.9	109.6	113.7	97.4	97.2	100.0
Producer Price Index (2000=100) *2	N.A.	N.A.	94.8	105.5	101.7	100.0	102.2	105.3
Consumer Price Index (2000=100) *2	N.A.	44.3	63.6	100.1	107.1	100.0	102.0	104.1
Growth Rate (%) *4								
Real GDP	10.31	0.67	3.90	2.29	7.95	7.08	7.02	6.38
Population	2.71	1.08	0.32	2.00	0.89	0.44	0.64	1.00
Price								
Producer Price Index	N.A.	N.A.	N.A.	2.8	0.2	0.7	2.2	3.0
Consumer Price Index	N.A.	3.5	10.3	9.0	-3.8	0.9	2.0	2.0

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Census & Statistics Department, Hong Kong Government.  
                  \*4 : Calculated from \*1, \*2 and \*3 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : HKD means Hong Kong Dollar, USD means United States Dollar



## 3.7 Indonesia

## Energy Balance Table of Indonesia in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	121,445	-	46,073	-	-	-	-	-	-
<b>2 Import</b>	38	-	15,483	21,743	6,115	-	958	826	11,608
<b>3 Export</b>	-89,646	-	-17,633	-6,284	-6	-	-	-0	-147
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	2,501	-	212	-167	-723	-	35	511	683
<b>6 Total Primary Energy Supply</b>	34,337	-	44,134	15,292	5,385	-	992	1,337	12,144
<b>7 Transfers</b>	-	-	-620	620	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-18,138	24	-43,789	35,908	10,237	-	1,061	6,648	5,013
<b>8.1 Main Activity Producer</b>	-18,110	-	-	-10,278	-	-	-	-	-7,602
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-43,789	46,186	10,237	-	1,061	6,648	12,615
<b>8.5 Coal Transformation</b>	-28	24	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-6	-61	-86	-31	-	-	-16	-34
<b>10. Discrepancy</b>	-0	0	336	-0	-0	-	-	-0	0
<b>11 Total Final Energy Consumption</b>	16,199	17	-	51,733	15,591	-	2,053	7,969	17,123
<b>12 Industry Sector</b>	16,199	17	-	7,613	-	-	-	455	5,091
<b>13 Transport Sector</b>	-	-	-	26,501	15,591	-	2,053	3	8,818
<b>14 Other Sector</b>	-	-	-	12,318	-	-	-	7,510	3,214
<b>14.1 Residential &amp; Commercial</b>	-	-	-	9,191	-	-	-	7,199	705
<b>14.2 Agriculture</b>	-	-	-	-	-	-	-	-	-
<b>14.3 Other</b>	-	-	-	3,127	-	-	-	312	2,509
<b>15 Non-energy</b>	-	-	-	5,301	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

## Energy Balance Table of Indonesia in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	105,348	-	48,922	-	-	-	-	-	-
<b>2 Import</b>	60	-	15,768	17,462	5,787	-	667	739	8,871
<b>3 Export</b>	-78,093	-	-18,019	-5,829	-	-117	-	-	-
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	-	-	-	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	27,315	-	46,672	11,634	5,787	-117	667	739	8,871
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-15,111	16	-44,402	37,131	8,827	3,139	1,329	6,753	6,294
<b>8.1 Main Activity Producer</b>	-15,092	-	-	-8,709	-	-	-	-	-6,648
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-44,402	45,840	8,827	3,139	1,329	6,753	12,942
<b>8.5 Coal Transformation</b>	-19	16	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-677	-	-2,270	-5,744	-915	-3,023	-90	427	794
<b>11 Total Final Energy Consumption</b>	11,527	16	-	43,021	13,699	-	1,907	7,918	15,959
<b>12 Industry Sector</b>	11,527	-	-	8,717	-	-	-	40	6,287
<b>13 Transport Sector</b>	-	-	-	25,507	13,699	-	1,907	1	9,672
<b>14 Other Sector</b>	-	16	-	8,797	-	-	-	7,877	-
<b>14.1 Residential &amp; Commercial</b>	-	16	-	8,797	-	-	-	7,877	-
<b>14.2 Agriculture</b>	-	-	-	-	-	-	-	-	-
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	-	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

Energy Balance Table of Indonesia in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	63,537	971	-	6,038	-	-	-	238,064
2,066	78	-	-	92	-	-	-	-	-	-	-	37,263
-129	-328	-	-	-5,672	-30,563	-	-	-	-	-	-	-144,127
-	-	-	-	-	-	-	-	-	-	-	-	-
-778	105	-	-	-	-	-	-	-	-	-	-	2,546
1,159	-145	-	-	-5,580	32,975	971	-	6,038	-	-	-	133,746
-	620	-	-	-	-	-	-	-	-	-	-	-
1,090	978	-	-	10,881	-11,707	-971	-	-6,038	-	12,250	-	-32,462
-2,676	-	-	-	-	-4,793	-971	-	-6,038	-	12,250	-	-27,940
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-6,915	-	-	-	-	-	-	-6,915
3,767	978	-	-	10,881	-	-	-	-	-	-	-	2,397
-	-	-	-	-	-	-	-	-	-	-	-	-4
-	-	-	-	-	-	-	-	-	-	-	-	-
-4	-	-	-	-	-9,966	-	-	-	-	-2,036	-	-12,154
0	-	-	-	0	-1,390	-	-	-	-	221	-	-833
2,244	1,453	-	-	5,301	9,912	-	-	-	-	10,435	-	88,297
1,902	165	-	-	-	7,658	-	-	-	-	3,939	-	35,427
37	-	-	-	-	6	-	-	-	-	7	-	26,515
306	1,288	-	-	-	51	-	-	-	-	6,488	-	18,857
-	1,288	-	-	-	51	-	-	-	-	6,488	-	15,730
-	-	-	-	-	-	-	-	-	-	-	-	-
306	-	-	-	-	-	-	-	-	-	-	-	3,127
-	-	-	-	5,301	2,197	-	-	-	-	-	-	7,498

Energy Balance Table of Indonesia in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	67,942	821	-	5,726	-	-	-	228,760
1,331	68	-	-	-	-	-	-	-	-	-	-	33,291
-	-285	-	-	-5,426	-29,590	-	-	-	-	-	-	-131,531
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
1,331	-217	-	-	-5,426	38,352	821	-	5,726	-	-	-	130,520
-	-	-	-	-	-	-	-	-	-	-	-	-
1,376	1,260	-	-	8,153	-11,659	-821	-	-5,726	-	11,447	-	-29,125
-2,061	-	-	-	-	-3,752	-821	-	-5,726	-	11,447	-	-22,654
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-7,906	-	-	-	-	-	-	-7,906
3,437	1,260	-	-	8,153	-	-	-	-	-	-	-	1,438
-	-	-	-	-	-	-	-	-	-	-	-	-2
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-11,230	-	-	-	-	-1,687	-	-12,917
-255	45	-	-	-2,726	-4,806	-	-	-	-	-76	-	-13,572
2,451	1,088	-	-	-	10,657	-	-	-	-	9,684	-	74,906
2,223	168	-	-	-	6,244	-	-	-	-	3,751	-	30,239
228	-	-	-	-	5	-	-	-	-	-	-	25,512
-	920	-	-	-	43	-	-	-	-	5,934	-	14,789
-	920	-	-	-	43	-	-	-	-	5,554	-	14,410
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	379	-	379
-	-	-	-	-	4,366	-	-	-	-	-	-	4,366

## Major Energy Indicators of Indonesia

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	31,067	36,101	53,252	82,578	101,236	130,970	130,520	133,746
Indigenous Production	92,083	95,715	119,434	168,134	183,995	206,158	228,760	238,064
Import	7,367	5,097	9,999	15,761	21,403	41,760	33,291	37,263
Export	-68,076	-64,646	-75,853	-100,911	-103,804	-115,627	-131,531	-144,127
Final Energy Consumption	21,078	24,316	33,956	49,272	63,569	74,750	74,906	88,297
Industry	6,756	8,285	11,767	19,678	22,658	29,104	30,239	35,427
Transport	6,236	7,086	11,205	16,673	21,452	25,858	25,512	26,515
Residential & Commercial	7,138	6,057	7,133	9,628	14,457	14,905	14,410	15,730
Agriculture	-	-	-	-	-	-	-	-
Non-energy	948	2,658	3,456	2,877	4,605	4,526	4,366	7,498
<b>Coal, Coal Products</b>								
Primary Energy Supply	166	889	4,056	6,579	10,956	23,742	27,315	34,337
Indigenous Production	200	873	5,785	23,955	44,007	82,754	105,348	121,445
Import	26	398	663	547	272	53	60	38
Export	-59	-383	-2,392	-17,924	-33,323	-57,745	-78,093	-89,646
Transformation Sector	-	-349	-2,252	-3,183	-10,052	-13,959	-15,095	-18,114
Power Generation	-	-349	-2,252	-3,163	-10,048	-13,956	-15,092	-18,110
Final Energy Consumption	75	319	1,149	1,116	2,053	8,499	11,543	16,217
Industry	61	282	1,110	1,076	1,821	8,486	11,527	16,217
Transport	14	1	0	-	-	-	-	-
Residential & Commercial	-	-	-	2	17	13	16	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	36	39	16	215	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	30,739	30,196	38,632	41,784	49,852	49,041	46,672	44,134
Indigenous Production	76,731	64,984	70,733	72,904	68,981	48,137	48,922	46,073
Import	4,387	4,313	6,085	9,107	10,660	20,471	15,768	15,483
Export	-50,379	-39,102	-38,186	-40,227	-29,789	-19,567	-18,019	-17,633
Transformation Sector	-25,704	-26,632	-36,471	-39,246	-49,298	-44,642	-44,402	-43,789
Petroleum Refineries	-25,704	-26,632	-36,471	-39,246	-49,298	-44,642	-44,402	-43,789
<b>Petroleum Products</b>								
Primary Energy Supply	-4,990	-7,173	-8,202	-7,875	1,171	13,873	11,634	15,292
Import	2,955	385	3,251	6,107	10,471	21,235	17,462	21,743
Export	-7,637	-7,494	-11,125	-13,576	-8,942	-7,363	-5,829	-6,284
Transformation Sector	24,640	25,001	36,586	41,497	45,445	37,089	37,131	35,908
Power Generation	-1,690	-2,929	-3,764	-2,676	-4,501	-9,259	-8,709	-10,278
Petroleum Refineries	25,865	27,941	38,041	41,588	48,490	46,348	45,840	46,186
Final Energy Consumption	18,052	18,184	24,681	33,260	44,061	45,952	43,021	51,733
Industry	4,751	4,914	6,317	8,739	10,948	10,444	8,717	7,613
Transport	6,221	7,084	11,203	16,661	21,432	25,852	25,507	26,501
Residential & Commercial	6,687	5,629	6,379	7,715	10,873	9,656	8,797	9,191
Agriculture	-	-	-	-	-	-	-	-
Non-energy	393	557	782	-	755	-	-	5,301
<b>Natural Gas</b>								
Primary Energy Supply	4,827	11,307	16,889	38,832	34,048	37,710	38,352	32,975
Indigenous Production	14,828	28,975	41,040	68,017	65,798	68,663	67,942	63,537
Import	-	-	-	-	-	-	-	-
Export	-10,002	-17,668	-24,151	-29,185	-31,750	-30,953	-29,590	-30,563
Transformation Sector	-1,278	-4,622	-5,616	-18,190	-9,590	-11,300	-11,659	-11,707
Power Generation	-	-91	-249	-9,515	-10,468	-3,423	-3,752	-4,793
Final Energy Consumption	2,326	4,385	5,504	7,831	8,089	11,093	10,657	9,912
Industry	1,664	2,313	2,862	4,951	4,407	6,523	6,244	7,658
Transport	-	-	1	13	20	5	5	6
Residential & Commercial	107	7	5	7	28	39	43	51
Agriculture	-	-	-	-	-	-	-	-
Non-energy	554	2,065	2,636	2,861	3,634	4,526	4,366	2,197
<b>Electricity</b>								
Power Generation	855	1,810	3,245	7,889	10,561	10,952	11,447	12,250
Thermal	529	1,112	2,310	6,754	9,699	10,027	10,626	11,279
Hydro	325	698	935	1,136	862	925	821	971
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	624	1,428	2,624	7,065	9,365	9,205	9,684	10,435
Industry	280	776	1,478	4,913	5,482	3,651	3,751	3,939
Transport	-	-	1	-	-	-	-	7
Residential & Commercial	344	421	749	1,905	3,538	5,197	5,554	6,488
Agriculture	-	-	-	-	-	-	-	-

Note: Total excludes non-commercial biomass supply and consumption.

## Major Economic Indicators of Indonesia

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	148.30	163.04	178.23	192.75	206.27	220.56	223.04	225.63
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	58.82	77.35	109.15	159.38	165.02	207.89	219.33	233.10
Real Term (Billions of 2000 Price and 2000 PPP)	176.54	232.16	327.59	478.35	495.27	623.94	658.26	699.59
Nominal (Billions of Current USD)	78.01	87.34	114.43	202.13	165.02	285.87	364.57	432.04
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	397	474	612	827	800	943	983	1,033
Real Term (2000 Price and 2000 PPP)	1,190	1,424	1,838	2,482	2,401	2,829	2,951	3,101
Nominal (Current USD)	526	536	642	1,049	800	1,296	1,635	1,915
Nominal GDP & its Components (Billions of Current IDR) *1								
Gross Domestic Product	48,913	96,997	210,866	454,514	1,389,770	2,774,281	3,339,217	3,949,321
Household Final Consumption Expenditure, etc.	25,594	57,201	119,802	279,876	856,798	1,785,596	2,092,656	2,510,504
General Government Final Consumption Expenditure	5,148	10,893	18,649	35,584	90,780	224,981	288,080	329,760
Gross Fixed Capital Formation	10,550	22,041	59,758	129,217	275,882	655,854	805,786	986,215
Stock Change	1,223	5,077	4,911	15,900	33,283	39,975	42,382	-1,053
Exports of Goods and Services	16,718	21,534	53,409	119,593	569,490	945,122	1,036,316	1,162,974
Imports of Goods and Services	9,886	19,835	50,046	125,657	423,318	830,083	855,588	1,003,271
Real GDP & its Components (Billions of 2000 IDR) *1								
Gross Domestic Product	495,380	651,453	919,241	1,342,285	1,389,769	1,750,815	1,847,127	1,963,092
Household Final Consumption Expenditure, etc.	226,405	400,070	480,808	726,185	856,798	1,043,805	1,076,928	1,130,847
General Government Final Consumption Expenditure	50,448	65,867	84,219	97,353	90,780	134,626	147,564	153,310
Gross Fixed Capital Formation	99,861	125,206	214,557	346,858	275,881	393,500	403,719	441,614
Stock Change	-5,472	-7,196	-17,177	-24,459	33,283	33,508	29,027	-243
Exports of Goods and Services	275,262	204,959	301,744	512,137	569,490	793,613	868,256	942,431
Imports of Goods and Services	167,806	215,706	255,995	488,016	423,318	639,702	694,605	756,895
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	25.1	22.4	19.4	15.1	15.6	14.5	14.2	13.8
Industry	37.4	37.1	41.0	44.0	45.9	44.1	43.7	43.0
Services, etc.	36.5	39.5	39.1	40.8	38.5	41.4	42.1	43.1
Manufacturing Production Index (2000=100)	24.5	32.5	56.9	100.8	84.1	100.0	98.4	103.8
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	21.909	18.590	25.675	45.417	65.403	86.996	103.527	118.014
Imports, c.i.f.	10.834	10.262	21.837	40.630	43.595	75.533	80.346	92.778
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	5.822	5.352	6.533	25.042	17.534	29.660	32.754
Current Account	N.A.	-1.923	-2.988	-6.431	7.992	0.278	10.859	10.492
Overall Balance	0.000	0.510	2.251	1.573	3.926	-2.111	14.958	12.706
Foreign Exchange Rate (IDR/USD) *1	626.99	1,110.58	1,842.81	2,248.61	8,421.78	9,704.74	9,159.32	9,141.00
Purchasing Power Parity (IDR/International Dollar) *1	513.13	599.74	788.79	1,031.76	2,806.08	3,934.26	4,351.36	4,717.08
Price Indices								
GDP Deflator (2000=100) *3	9.9	14.9	22.9	33.9	100.0	158.5	180.8	201.2
Wholesale Price Index (2000=100) *2	6.7	10.9	16.7	22.5	66.2	100.0	113.7	130.4
Consumer Price Index (2000=100) *2	8.1	12.9	18.4	28.2	64.1	100.0	113.1	120.3
Growth Rate (%) *3								
Real GDP	8.72	3.48	9.00	8.40	4.92	5.69	5.50	6.28
Population	2.09	1.85	1.81	1.42	1.32	1.37	1.13	1.16
Price								
Wholesale Price Index	26.8	5.0	10.0	11.4	12.5	15.3	13.7	14.7
Consumer Price Index	18.0	4.7	7.8	9.4	3.7	10.5	13.1	6.3

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : IDR means Rupiah, USD means United States Dollar  
                  : PPP means Purchasing Power Parity





## 3.8 Japan

Energy Balance Table of Japan in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	722	-	833	-	-	-	-	-	-
<b>2 Import</b>	111,588	1,392	206,464	45,290	767	20,934	756	283	278
<b>3 Export</b>	-	-1,072	-	-13,740	-335	-23	-2,061	-607	-6,715
<b>4 International Marine Bunkers</b>	-	-	-	-5,939	-	-	-	-	-103
<b>5 Stock Changes</b>	-	-	2,370	732	-33	-142	17	459	-99
<b>6 Total Primary Energy Supply</b>	112,310	320	209,668	26,343	398	20,769	-1,288	135	-6,639
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-96,991	28,224	-209,104	180,213	45,860	16,420	12,259	19,122	36,709
<b>8.1 Main Activity Producer</b>	-48,517	-4,740	-7,787	-12,584	-	-	-	-9	-130
<b>8.2 Autoproducers</b>	-8,757	-2,839	-	-10,184	-	-1,325	-	-44	-
<b>8.3 Gas Processing</b>	-	-	-	-967	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-206,946	210,233	45,860	23,469	12,259	19,176	36,839
<b>8.5 Coal Transformation</b>	-39,718	35,803	-	-560	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	5,630	-5,724	-	-5,724	-	-	-
<b>9. Loss &amp; Own Use</b>	-170	-3,242	-	-12,979	-	-46	-	-99	-36
<b>10. Discrepancy</b>	744	-3,442	-564	535	721	-1,281	89	3	510
<b>11 Total Final Energy Consumption</b>	15,892	21,860	-	194,112	46,980	35,863	11,060	19,162	30,545
<b>12 Industry Sector</b>	15,892	20,998	-	64,526	148	35,863	-	3,725	3,611
<b>13 Transport Sector</b>	-	-	-	88,368	46,833	-	11,060	-	25,254
<b>14 Other Sector</b>	-	862	-	36,172	-	-	-	15,436	1,680
<b>14.1 Residential &amp; Commercial</b>	-	862	-	29,669	-	-	-	13,462	190
<b>14.2 Agriculture</b>	-	-	-	4,385	-	-	-	1,866	821
<b>14.3 Other</b>	-	-	-	2,118	-	-	-	108	669
<b>15 Non-energy</b>	-	-	-	5,046	-	-	-	-	-

Energy Balance Table of Japan in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	685	-	779	-	-	-	-	-	-
<b>2 Import</b>	106,337	1,187	210,313	50,047	1,809	21,625	2,025	973	276
<b>3 Export</b>	-	-1,321	-	-9,171	-230	-4	-975	-295	-3,517
<b>4 International Marine Bunkers</b>	-	-	-	-6,306	-	-	-	-	-34
<b>5 Stock Changes</b>	-528	-	-1,007	-1,474	-49	201	-15	-831	-32
<b>6 Total Primary Energy Supply</b>	106,494	-135	210,085	33,096	1,529	21,822	1,035	-153	-3,306
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-96,195	28,429	-209,265	183,295	45,450	15,435	10,115	22,077	34,056
<b>8.1 Main Activity Producer</b>	-47,318	-4,522	-6,557	-10,354	-	-	-	-74	-129
<b>8.2 Autoproducers</b>	-9,113	-2,952	-	-11,193	-	-1,323	-	-66	-
<b>8.3 Gas Processing</b>	-	-14	-	-1,143	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-208,379	212,320	45,450	22,546	10,115	22,217	34,185
<b>8.5 Coal Transformation</b>	-39,765	35,917	-	-548	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	5,671	-5,788	-	-5,788	-	-	-
<b>9. Loss &amp; Own Use</b>	-163	-3,175	-	-12,808	-	-48	-	-140	-47
<b>10. Discrepancy</b>	4,478	-2,976	-819	153	793	-1,575	258	52	615
<b>11 Total Final Energy Consumption</b>	14,614	22,144	-	203,736	47,773	35,635	11,409	21,836	31,318
<b>12 Industry Sector</b>	14,614	21,160	-	68,024	108	35,635	-	4,777	3,705
<b>13 Transport Sector</b>	-	-	-	90,876	47,665	-	11,409	-	25,889
<b>14 Other Sector</b>	-	984	-	39,755	-	-	-	17,059	1,723
<b>14.1 Residential &amp; Commercial</b>	-	984	-	32,421	-	-	-	14,815	195
<b>14.2 Agriculture</b>	-	-	-	4,955	-	-	-	2,121	842
<b>14.3 Other</b>	-	-	-	2,379	-	-	-	123	687
<b>15 Non-energy</b>	-	-	-	5,081	-	-	-	-	-

Energy Balance Table of Japan in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,448	7,313	72,710	3,551	7,785	-	-	96,361
3,663	15,494	-	-	3,115	78,437	-	-	-	-	-	-	443,171
-3,101	-129	-	-	-768	-	-	-	-	-	-	-	-14,811
-5,808	-	-	-	-28	-	-	-	-	-	-	-	-5,939
201	276	-	-	54	-19	-	-	-	-	-	-	3,083
-5,044	15,640	-	-	2,372	81,865	7,313	72,710	3,551	7,785	-	-	521,865
-	-	-	-	-	-	-	-	-	-	-	-	-
30,416	3,877	8,401	-	7,149	-52,735	-7,313	-72,710	-2,983	-7,850	101,293	674	-139,281
-11,912	-533	-	-	-	-50,517	-6,664	-72,710	-2,598	-1,240	85,192	674	-121,492
-7,581	-101	-953	-	-180	-3,315	-649	-	-385	-6,610	16,101	-	-16,637
-	-967	-0	-	-	1,097	-	-	-	-	-	-	130
49,909	5,479	9,354	-	7,888	-	-	-	-	-	-	-	3,286
-	-	-	-	-560	-	-	-	-	-	-	-	-4,475
-	-	-	-	-	-	-	-	-	-	-	-	-94
-2,062	-696	-8,350	-	-1,691	-3,266	-	-	-	-	-11,748	-	-31,405
-193	867	-51	-	-131	2,622	-0	-	0	3,102	-1,294	-82	1,621
23,117	19,688	-	-	7,699	28,487	-	-	568	3,037	88,251	592	352,799
9,499	9,028	-	-	2,653	13,961	-	-	-	3,008	38,348	-	156,733
4,007	1,215	-	-	-	-	-	-	-	-	1,829	-	90,197
9,611	9,445	-	-	-	14,526	-	-	568	29	48,074	592	100,824
6,572	9,445	-	-	-	14,526	-	-	568	29	47,736	592	93,982
1,698	-	-	-	-	-	-	-	-	-	339	-	4,723
1,341	-	-	-	-	-	-	-	-	-	-	-	2,118
-	-	-	-	5,046	-	-	-	-	-	-	-	5,046

Energy Balance Table of Japan in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,061	8,230	79,298	3,659	7,979	-	-	103,691
3,777	16,358	-	-	3,204	73,004	-	-	-	-	-	-	440,888
-3,202	-79	-	-	-870	-	-	-	-	-	-	-	-10,492
-6,257	-	-	-	-16	-	-	-	-	-	-	-	-6,306
-419	-324	-	-	-5	-26	-	-	-	-	-	-	-3,036
-6,100	15,956	-	-	2,312	76,039	8,230	79,298	3,659	7,979	-	-	524,745
-	-	-	-	-	-	-	-	-	-	-	-	-
36,702	3,792	8,227	-	7,441	-46,929	-8,230	-79,298	-3,091	-8,491	99,969	673	-139,133
-9,642	-508	-	-	-	-44,941	-7,534	-79,298	-2,701	-1,390	83,703	673	-120,239
-8,423	-91	-1,084	-	-207	-3,279	-695	-	-391	-7,101	16,266	-	-18,458
-	-1,143	-0	-	-	1,291	-	-	-	-	-	-	134
54,767	5,534	9,311	-	8,195	-	-	-	-	-	-	-	3,941
-	-	-	-	-548	-	-	-	-	-	-	-	-4,395
-	-	-	-	-	-	-	-	-	-	-	-	-117
-2,004	-697	-8,111	-	-1,761	-1,952	-	-	-	-	-11,166	-	-29,264
-410	645	-116	-	-111	24	-0	-	-	3,043	781	-89	4,594
28,187	19,697	-	-	7,881	27,182	-	-	568	2,531	89,583	584	360,941
12,033	8,965	-	-	2,800	12,053	-	-	-	2,502	37,794	-	156,147
4,658	1,254	-	-	-	-	-	-	-	-	1,852	-	92,728
11,496	9,477	-	-	-	15,128	-	-	568	29	49,937	584	106,986
7,935	9,477	-	-	-	15,128	-	-	568	29	49,612	584	99,326
1,993	-	-	-	-	-	-	-	-	-	325	-	5,280
1,569	-	-	-	-	-	-	-	-	-	-	-	2,379
-	-	-	-	5,081	-	-	-	-	-	-	-	5,081

## Major Energy Indicators of Japan

	1980	1985	1990	1995	2000	2005	2006	2007
ktoe								
<b>Total</b>								
Primary Energy Supply	352,597	365,072	432,546	490,786	509,254	528,255	524,745	521,865
Indigenous Production	48,709	64,769	72,578	94,829	101,967	99,662	103,691	96,361
Import	319,945	311,332	376,440	417,131	424,865	440,407	440,888	443,171
Export	-16,707	-12,480	-14,834	-23,158	-18,018	-9,705	-10,492	-14,811
Final Energy Consumption	252,650	257,526	305,094	339,893	359,974	363,919	360,941	352,799
Industry	131,376	124,842	140,776	150,362	160,749	156,222	156,147	156,733
Transport	52,317	55,640	70,090	81,288	86,933	93,591	92,728	90,197
Residential & Commercial	54,206	62,009	74,657	89,200	95,458	100,212	99,326	93,982
Agriculture	8,175	8,185	11,231	11,292	9,988	5,954	5,280	4,723
Non-energy	6,571	6,851	8,339	7,751	6,845	5,219	5,081	5,046
<b>Coal, Coal Products</b>								
Primary Energy Supply	63,565	73,023	75,641	82,827	90,989	110,816	106,359	112,630
Indigenous Production	12,522	10,424	5,890	3,593	1,674	567	685	722
Import	51,439	64,305	70,045	81,045	90,986	110,603	107,524	112,980
Export	-1,465	-1,553	-1,039	-1,995	-1,488	-1,099	-1,321	-1,072
Transformation Sector	-20,520	-28,694	-32,516	-41,222	-49,618	-68,846	-67,766	-68,768
Power Generation	-10,689	-20,221	-24,751	-33,953	-44,901	-65,552	-63,905	-64,853
Final Energy Consumption	37,439	38,907	39,154	37,618	39,318	36,391	36,758	37,752
Industry	36,446	37,739	38,389	36,578	38,414	35,461	35,773	36,890
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	992	1,168	765	1,040	904	929	984	862
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	219,555	174,713	200,317	234,712	218,284	214,674	210,085	209,668
Indigenous Production	426	547	554	758	642	794	779	833
Import	219,405	173,672	200,267	234,050	216,923	212,130	210,313	206,464
Export	-	-	-	-	-	-	-	-
Transformation Sector	-216,698	-172,023	-199,036	-231,024	-218,532	-214,624	-209,265	-209,104
Petroleum Refineries	-202,533	-160,698	-180,435	-215,641	-210,772	-213,946	-208,379	-206,946
<b>Petroleum Products</b>								
Primary Energy Supply	14,099	31,312	48,789	32,742	37,546	36,407	33,096	26,343
Import	29,468	41,114	64,444	52,010	54,172	49,604	50,047	45,290
Export	-15,242	-10,927	-13,795	-21,163	-16,529	-8,606	-9,171	-13,740
Transformation Sector	156,639	127,899	141,230	178,448	187,346	186,316	183,295	180,213
Power Generation	-42,852	-27,681	-33,288	-29,361	-24,516	-23,828	-21,547	-22,768
Petroleum Refineries	203,921	159,102	178,475	211,914	215,580	217,666	212,320	210,233
Final Energy Consumption	158,787	153,149	183,505	205,895	211,417	211,234	203,736	194,112
Industry	65,073	55,111	63,618	71,062	74,943	71,328	68,024	64,526
Transport	51,008	54,251	68,395	79,465	85,058	91,739	90,876	88,368
Residential & Commercial	28,079	29,000	32,223	36,709	35,007	34,604	32,421	29,669
Agriculture	8,054	7,935	10,930	10,908	9,564	5,623	4,955	4,385
Non-energy	6,571	6,851	8,339	7,751	6,845	5,219	5,081	5,046
<b>Natural Gas</b>								
Primary Energy Supply	21,748	34,204	43,479	51,975	64,940	70,913	76,039	81,865
Indigenous Production	2,115	1,962	1,803	1,948	2,157	2,855	3,061	3,448
Import	19,633	32,242	41,684	50,027	62,784	68,070	73,004	78,437
Export	-	-	-	-	-	-	-	-
Transformation Sector	-11,602	-22,043	-28,790	-33,261	-42,175	-46,401	-46,929	-52,735
Power Generation	-15,892	-25,981	-32,457	-37,355	-45,970	-48,190	-48,220	-53,832
Final Energy Consumption	9,228	11,274	14,055	18,479	22,242	24,758	27,182	28,487
Industry	2,180	2,872	3,977	6,471	8,618	9,998	12,053	13,961
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	7,047	8,402	10,078	12,008	13,624	14,759	15,128	14,526
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	48,677	56,805	71,693	82,828	92,239	99,064	99,969	101,293
Thermal	19,325	9,758	12,842	683	1,432	15,326	12,441	21,270
Hydro	7,828	7,435	7,827	7,124	7,479	7,372	8,230	7,313
Nuclear	21,523	39,612	51,025	75,021	83,328	76,366	79,298	72,710
Final Energy Consumption	44,024	50,353	64,052	73,825	82,912	87,874	89,583	88,251
Industry	25,216	26,475	31,971	33,823	36,289	36,968	37,794	38,348
Transport	1,309	1,389	1,696	1,823	1,875	1,851	1,852	1,829
Residential & Commercial	17,395	22,266	30,115	37,876	44,420	48,724	49,612	47,736
Agriculture	104	223	270	304	328	331	325	339

## Major Economic Indicators of Japan

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	116.78	120.75	123.54	125.44	126.87	127.77	127.76	127.77
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	2,800.61	3,261.85	4,122.34	4,445.37	4,667.45	4,979.55	5,098.93	5,206.01
Real Term (Billions of 2000 Price and 2000 PPP)	1,947.87	2,268.67	2,867.16	3,091.83	3,246.29	3,463.36	3,546.39	3,620.86
Nominal (Billions of Current USD)	1,055.26	1,346.80	3,018.27	5,247.61	4,667.45	4,552.19	4,375.99	4,384.12
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	23,981	27,012	33,369	35,439	36,789	38,972	39,911	40,745
Real Term (2000 Price and 2000 PPP)	16,680	18,788	23,209	24,648	25,588	27,106	27,759	28,339
Nominal (Current USD)	9,036	11,153	24,432	41,834	36,789	35,627	34,253	34,312
Nominal GDP & its Components (Billions of Current JPY) *1								
Gross Domestic Product	239,271	321,261	437,023	493,588	502,990	501,734	508,925	516,246
Household Final Consumption Expenditure, etc.	129,364	173,007	229,538	271,656	282,772	285,936	290,719	N.A.
General Government Final Consumption Expenditure	33,616	44,935	58,574	74,663	84,942	90,602	89,958	N.A.
Gross Fixed Capital Formation	77,058	90,164	142,233	138,090	126,634	116,885	119,415	N.A.
Stock Change	1,439	2,106	2,539	2,222	1,326	1,356	2,484	N.A.
Exports of Goods and Services	32,817	46,177	45,863	45,230	55,256	71,913	81,756	N.A.
Imports of Goods and Services	35,036	35,137	41,690	38,272	47,940	64,957	75,408	N.A.
Real GDP & its Components (Billions of 2000 JPY) *1								
Gross Domestic Product	301,809	351,515	444,246	479,058	502,990	536,624	549,489	561,028
Household Final Consumption Expenditure, etc.	169,091	196,003	242,432	271,491	282,772	300,398	306,441	N.A.
General Government Final Consumption Expenditure	44,503	53,095	62,783	74,041	84,942	94,843	94,470	N.A.
Gross Fixed Capital Formation	83,294	90,372	135,213	130,343	126,634	124,158	125,740	N.A.
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	22,833	31,460	35,988	42,043	55,256	73,584	80,601	N.A.
Imports of Goods and Services	17,668	19,547	33,685	39,918	47,940	57,863	60,265	N.A.
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	3.1	2.9	2.4	1.7	1.8	1.6	1.5	N.A.
Industry	36.6	35.7	37.0	33.3	32.4	31.8	32.0	N.A.
Services, etc.	60.3	61.5	60.6	64.9	65.7	66.6	66.4	N.A.
Industrial Production Index (2000=100) *2	67.2	79.6	99.1	94.0	98.4	100.0	104.4	107.3
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	130.441	177.164	287.581	443.116	479.249	594.941	646.725	714.327
Imports, c.i.f.	141.296	130.488	235.368	335.882	379.511	515.866	579.064	622.243
Balance of Payments (Billions of Current USD) *2								
Trade Balance	2.130	55.292	69.283	131.787	116.716	93.958	81.303	104.752
Current Account	-10.750	51.129	44.078	111.044	119.660	165.783	170.517	210.490
Overall Balance	5.026	-0.500	-9.090	58.611	48.955	22.325	31.982	36.524
Foreign Exchange Rate (JPY/USD) *1	226.74	238.54	144.79	94.06	107.77	110.22	116.30	117.75
Purchasing Power Parity (JPY/International Dollar) *1	228.80	204.44	187.85	174.34	154.94	129.55	124.33	120.14
Price Indices								
GDP Deflator (2000=100) *3	79.3	91.4	98.4	103.0	100.0	93.5	92.6	92.0
Wholesale Price Index (2000=100) *2	116.1	116.7	110.8	106.5	102.4	100.0	102.2	104.0
Consumer Price Index (2000=100) *2	76.8	88.1	94.1	100.7	102.2	100.0	100.2	100.3
Growth Rate (%) *3								
Real GDP	2.82	5.08	5.20	1.96	2.86	1.93	2.40	2.10
Population	0.79	0.61	0.34	0.38	0.17	0.01	-0.01	0.01
Price								
Wholesale Price Index	14.9	-0.8	1.5	-0.8	0.0	1.7	2.2	1.8
Consumer Price Index	7.8	2.0	3.1	-0.1	-0.7	-0.3	0.2	0.1

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note             : N.A. means "not available"  
                  : JPY means Yen, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.9 Republic of Korea

Energy Balance Table of Republic of Korea in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	1,328	-	581	-	-	-	-	-	-
2 Import	54,117	358	120,853	24,365	-	17,419	-	66	214
3 Export	-	-	-27	-39,317	-1,903	-3,573	-9,694	-165	-14,054
4 International Marine Bunkers	-	-	-	-9,680	-	-	-	-	-1,066
5 Stock Changes	505	-	670	181	-14	151	-137	160	-247
6 Total Primary Energy Supply	55,949	358	122,077	-24,451	-1,916	13,997	-9,831	60	-15,154
7 Transfers	-	-	-	1,938	765	492	284	-334	60
8 Total Transformation Sector	-51,550	5,304	-130,699	121,278	9,060	23,603	14,220	3,810	34,977
8.1 Main Activity Producer	-34,051	-	-	-4,563	-	-281	-	-101	-24
8.2 Autoproducers	-1,491	-2,614	-	-522	-	-	-	-9	-
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-130,789	126,436	9,060	23,883	14,220	3,921	35,002
8.5 Coal Transformation	-16,008	7,918	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	90	-73	-	-	-	-1	-1
9. Loss & Own Use	-	-1,841	-35	-5,155	-	-	-	-39	-25
10. Discrepancy	380	0	8,657	-9,710	-104	-8,786	-33	18	-201
11 Total Final Energy Consumption	4,779	3,821	-	83,900	7,804	29,305	4,639	3,516	19,656
12 Industry Sector	4,779	2,820	-	7,296	-	-	-	321	1,174
13 Transport Sector	-	-	-	32,520	7,804	-	4,208	9	15,351
14 Other Sector	-	1,001	-	9,948	-	-	432	3,159	3,131
14.1 Residential & Commercial	-	1,001	-	6,749	-	-	1	2,832	900
14.2 Agriculture	-	-	-	1,273	-	-	-	313	856
14.3 Other	-	-	-	1,926	-	-	430	14	1,375
15 Non-energy	-	-	-	34,135	-	29,305	-	27	-

Energy Balance Table of Republic of Korea in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	1,210	-	571	-	-	-	-	-	-
2 Import	50,173	204	122,761	22,346	-	15,377	-	44	261
3 Export	-	-	-2	-39,129	-2,479	-3,407	-8,364	-624	-12,411
4 International Marine Bunkers	-	-	-	-10,427	-	-	-	-	-1,032
5 Stock Changes	1,022	-	-1,485	-1,021	-82	143	-74	-324	-376
6 Total Primary Energy Supply	52,406	204	121,845	-28,231	-2,561	12,113	-8,438	-904	-13,558
7 Transfers	-	-	-	2,290	687	336	99	-94	26
8 Total Transformation Sector	-48,576	4,457	-129,064	120,952	9,275	22,024	12,777	5,401	33,018
8.1 Main Activity Producer	-32,183	-	-	-4,741	-	-198	-	-126	-27
8.2 Autoproducers	-1,555	-2,369	-	-535	-	-	-	-16	-
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-129,112	126,244	9,275	22,222	12,777	5,543	33,048
8.5 Coal Transformation	-14,838	6,826	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	48	-16	-	-	-	-	-2
9. Loss & Own Use	-	-792	-33	-4,967	-	-22	-	-12	-23
10. Discrepancy	624	-1	7,252	-8,470	69	-7,215	-28	-191	-26
11 Total Final Energy Consumption	4,453	3,868	-	81,573	7,471	27,237	4,410	4,200	19,437
12 Industry Sector	4,453	2,764	-	7,846	-	-	2	362	1,163
13 Transport Sector	-	-	-	31,542	7,471	-	3,955	12	15,217
14 Other Sector	-	1,104	-	10,482	-	-	453	3,790	3,057
14.1 Residential & Commercial	-	1,104	-	7,313	-	-	2	3,445	871
14.2 Agriculture	-	-	-	1,269	-	-	-	326	816
14.3 Other	-	-	-	1,900	-	-	451	19	1,370
15 Non-energy	-	-	-	31,703	-	27,237	-	36	-



Energy Balance Table of Republic of Korea in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	317	434	37,249	79	2,571	-	-	42,559	
892	5,774	-	-	-	29,915	-	-	-	29	-	-	229,636	
-6,524	-51	-	-	-3,352	-	-	-	-	-	-	-	-39,343	
-8,614	-	-	-	-	-	-	-	-	-	-	-	-9,680	
200	91	-	-	-23	955	-	-	-	-	-	-	2,311	
-14,045	5,814	-	-	-3,374	31,187	434	37,249	79	2,600	-	-	225,483	
105	466	178	-	-78	-	-	-	-	-	-	-	1,938	
23,172	3,335	2,278	-	6,824	-14,342	-434	-37,249	-38	-552	36,749	4,744	-66,790	
-4,156	-	-	-	-	-13,862	-434	-37,249	-33	-105	34,481	1,461	-54,356	
-513	-	-	-	-	-528	-	-	-5	-390	2,268	3,283	2	
-	-	-	-	-	48	-	-	-	-	-	-	48	
27,841	3,335	2,278	-	6,895	-	-	-	-	-	-	-	-4,353	
-	-	-	-	-	-	-	-	-	-	-	-	-8,090	
-	-	-	-	-71	-	-	-	-	-57	-	-	-40	
-2,467	-44	-2,456	-	-123	-326	-	-	-	-	-3,060	-141	-10,557	
-373	83	-	-	-313	476	-	-	-0	0	-47	-13	-258	
6,391	9,653	-	-	2,935	16,995	-	-	40	2,048	33,642	4,590	149,816	
4,971	718	-	-	112	4,890	-	-	1	1,659	17,245	2,998	41,689	
491	4,656	-	-	-	582	-	-	-	-	211	-	33,313	
928	2,299	-	-	-	11,523	-	-	40	389	16,185	1,592	40,679	
726	2,289	-	-	-	11,521	-	-	40	389	15,515	1,592	36,807	
104	1	-	-	-	2	-	-	-	-	518	-	1,793	
98	9	-	-	-	-	-	-	-	-	152	-	2,079	
-	1,980	-	-	2,823	-	-	-	-	-	-	-	34,135	

Energy Balance Table of Republic of Korea in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	393	449	38,764	62	2,397	-	-	43,846	
1,343	5,320	-	-	-	29,550	-	-	-	28	-	-	225,063	
-8,901	-75	-	-	-2,868	-	-	-	-	-	-	-	-39,131	
-9,395	-	-	-	-	-	-	-	-	-	-	-	-10,427	
-216	-32	-	-	-60	-1,249	-	-	-	-	-	-	-2,733	
-17,169	5,213	-	-	-2,928	28,694	449	38,764	62	2,425	-	-	216,618	
239	430	183	-	384	-	-	-	-	-	-	-	2,290	
26,840	3,530	2,147	-	5,940	-12,607	-449	-38,764	-23	-422	34,746	4,513	-65,238	
-3,972	-	-	-	-417	-11,933	-449	-38,764	-20	-54	32,629	1,406	-54,110	
-519	-	-	-	-	-747	-	-	-3	-337	2,117	3,107	-322	
-	-	-	-	-	73	-	-	-	-	-	-	73	
31,331	3,530	2,147	-	6,371	-	-	-	-	-	-	-	-2,868	
-	-	-	-	-	-	-	-	-	-	-	-	-8,012	
-	-	-	-	-14	-	-	-	-	-31	-	-	1	
-2,494	-	-2,330	-	-86	-415	-	-	-	-	-2,814	-91	-9,111	
-531	-574	-	-	26	628	-	-	-	-0	4	-17	20	
6,885	8,598	-	-	3,335	16,300	-	-	39	2,003	31,936	4,405	144,578	
5,558	656	-	-	104	4,366	-	-	1	1,621	16,294	2,856	40,201	
510	4,377	-	-	-	452	-	-	-	-	218	-	32,212	
817	2,365	-	-	-	11,482	-	-	39	382	15,425	1,549	40,461	
651	2,344	-	-	-	11,457	-	-	39	382	14,797	1,549	36,640	
117	10	-	-	-	25	-	-	-	-	482	-	1,776	
49	11	-	-	-	-	-	-	-	-	146	-	2,046	
-	1,200	-	-	3,231	-	-	-	-	-	-	-	31,703	

## Major Energy Indicators of Republic of Korea

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	38,321	52,892	93,373	147,604	189,572	212,712	216,618	225,483
Indigenous Production	9,215	14,547	22,622	21,382	32,734	43,050	43,846	42,559
Import	29,598	43,008	73,944	150,502	205,991	211,277	225,063	229,636
Export	-10	-3,567	-3,795	-15,748	-40,939	-35,740	-39,131	-39,343
Final Energy Consumption	35,685	43,496	65,195	107,295	130,120	143,283	144,578	149,816
Industry	15,567	17,822	19,259	29,142	37,782	39,475	40,201	41,689
Transport	4,672	6,375	14,863	26,945	30,005	31,653	32,212	33,313
Residential & Commercial	12,956	17,403	21,634	28,179	32,246	37,638	36,640	36,807
Agriculture	17	846	1,656	2,908	3,623	1,892	1,776	1,793
Non-energy	316	485	6,725	16,999	24,992	30,314	31,703	34,135
<b>Coal, Coal Products</b>								
Primary Energy Supply	12,539	21,542	25,558	26,611	39,448	49,471	52,610	56,307
Indigenous Production	8,139	9,851	7,576	2,465	1,790	1,214	1,210	1,328
Import	4,689	12,354	15,725	28,151	38,451	46,902	50,377	54,475
Export	-	-	-	-	-	-	-	-
Transformation Sector	-734	-3,878	-13,163	-17,322	-29,637	-41,148	-44,119	-46,246
Power Generation	-734	-3,878	-5,955	-11,854	-23,576	-33,078	-36,107	-38,156
Final Energy Consumption	11,805	17,043	11,717	7,407	8,351	8,186	8,322	8,600
Industry	3,471	6,166	3,052	6,041	7,785	7,233	7,218	7,599
Transport	2	-	-	-	-	-	-	-
Residential & Commercial	8,332	10,877	8,665	1,365	566	954	1,104	1,001
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	22,901	27,596	43,241	89,912	126,497	118,808	121,845	122,077
Indigenous Production	-	-	-	-	670	534	571	581
Import	22,901	27,596	42,674	89,242	125,813	117,341	122,761	120,853
Export	-	-	-	-25	-99	-3	-2	-27
Transformation Sector	-22,534	-27,988	-41,837	-91,976	-131,884	-126,087	-129,064	-130,699
Petroleum Refineries	-22,534	-27,988	-41,837	-91,976	-131,884	-126,099	-129,112	-130,789
<b>Petroleum Products</b>								
Primary Energy Supply	1,805	-942	6,778	3,828	-23,686	-23,869	-28,231	-24,451
Import	2,008	3,057	12,841	24,835	24,629	20,897	22,346	24,365
Export	-10	-3,567	-3,795	-15,723	-40,840	-35,737	-39,129	-39,317
Transformation Sector	18,038	22,821	39,031	81,786	118,679	117,746	120,952	121,278
Power Generation	-6,639	-4,249	-4,512	-9,892	-6,722	-5,657	-5,276	-5,085
Petroleum Refineries	24,692	27,155	43,543	91,946	125,625	123,434	126,244	126,436
Final Energy Consumption	21,052	22,015	43,948	80,154	83,605	82,035	81,573	83,900
Industry	10,143	8,883	10,879	13,780	11,001	7,943	7,846	7,296
Transport	4,636	6,313	14,776	26,806	29,830	31,106	31,542	32,520
Residential & Commercial	3,800	4,975	8,980	17,035	13,154	9,095	7,313	6,749
Agriculture	-	794	1,530	2,618	3,156	1,414	1,269	1,273
Non-energy	316	485	6,725	16,999	24,992	30,314	31,703	34,135
<b>Natural Gas</b>								
Primary Energy Supply	-	-	2,725	8,323	17,011	27,415	28,694	31,187
Indigenous Production	-	-	-	-	-	441	393	317
Import	-	-	2,681	8,261	17,071	26,112	29,550	29,915
Export	-	-	-	-	-	-	-	-
Transformation Sector	13	75	-2,037	-4,168	-5,757	-11,076	-12,607	-14,342
Power Generation	-	-	-2,037	-4,168	-5,757	-11,076	-12,680	-14,390
Final Energy Consumption	13	75	674	3,996	10,928	15,986	16,300	16,995
Industry	-	13	73	532	2,882	4,168	4,366	4,890
Transport	-	-	-	-	-	323	452	582
Residential & Commercial	13	62	601	3,464	8,035	11,470	11,457	11,521
Agriculture	-	-	-	-	11	24	25	2
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	3,203	4,989	9,062	15,812	24,951	33,488	34,746	36,749
Thermal	2,126	311	-5,267	-2,127	-3,928	-5,209	-4,467	-934
Hydro	171	315	547	471	482	446	449	434
Nuclear	906	4,363	13,782	17,468	28,396	38,251	38,764	37,249
Final Energy Consumption	2,815	4,363	8,117	14,041	22,628	30,756	31,936	33,642
Industry	1,954	2,760	4,970	8,004	12,934	15,820	16,294	17,245
Transport	34	62	87	138	175	224	218	211
Residential & Commercial	810	1,489	2,935	5,610	9,063	14,110	14,797	15,515
Agriculture	17	52	125	290	456	455	482	518

## Major Economic Indicators of Republic of Korea

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	38.12	40.81	42.87	45.09	47.01	48.14	48.30	48.46
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	128.03	186.57	295.60	430.55	533.39	664.39	698.80	734.48
Real Term (Billions of 2000 Price and 2000 PPP)	193.36	281.78	446.45	650.26	805.58	1,003.44	1,055.41	1,109.30
Nominal (Billions of Current USD)	63.83	96.62	263.78	517.12	533.39	844.87	951.77	1,049.24
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	3,358	4,572	6,895	9,548	11,347	13,802	14,469	15,158
Real Term (2000 Price and 2000 PPP)	5,072	6,905	10,414	14,421	17,137	20,845	21,852	22,893
Nominal (Current USD)	1,674	2,368	6,153	11,468	11,347	17,551	19,707	21,653
Nominal GDP & its Components (Billions of Current KRW) *1								
Gross Domestic Product	38,775	84,061	186,691	398,838	603,236	865,241	908,744	975,013
Household Final Consumption Expenditure, etc.	24,251	47,600	94,968	208,462	330,390	465,431	494,918	530,264
General Government Final Consumption Expenditure	4,825	9,426	22,054	44,687	72,101	120,010	131,901	143,262
Gross Fixed Capital Formation	12,492	24,187	69,234	148,820	180,748	249,690	260,651	278,168
Stock Change	-158	1,003	801	1,411	3,616	7,176	8,537	8,750
Exports of Goods and Services	12,433	26,876	52,187	114,978	232,633	339,757	360,625	408,754
Imports of Goods and Services	15,496	26,379	54,195	119,336	215,398	316,378	348,023	394,026
Real GDP & its Components (Billions of 2000 KRW) *1								
Gross Domestic Product	166,733	242,970	384,963	560,705	694,628	865,241	910,049	956,515
Household Final Consumption Expenditure, etc.	107,072	151,118	230,340	335,390	387,035	465,431	487,439	512,095
General Government Final Consumption Expenditure	33,813	40,347	61,477	81,220	96,290	120,010	127,909	134,807
Gross Fixed Capital Formation	42,567	62,827	136,791	215,728	214,018	249,690	258,199	269,080
Stock Change	-2,476	-19,317	-5,653	19,808	5,959	7,176	10,017	8,649
Exports of Goods and Services	17,910	28,945	50,066	101,218	212,433	339,757	378,375	426,071
Imports of Goods and Services	27,306	36,065	77,615	153,381	217,624	316,378	352,088	393,207
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	9.2	8.6	5.4	4.1	3.6	3.0	2.9	2.9
Industry	25.0	27.3	30.5	30.4	31.6	33.8	34.3	34.6
Services, etc.	60.0	57.7	55.8	55.4	54.2	52.9	52.5	52.5
Industrial Production Index (2000=100) *2	10.5	17.3	31.8	47.9	74.3	100.0	108.4	115.9
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	17.512	30.282	65.016	125.058	172.267	284.419	325.465	371.489
Imports, c.i.f.	22.292	31.136	69.844	135.119	160.481	261.238	309.383	356.846
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-4.613	-0.020	-2.461	-4.365	16.954	32.683	27.905	29.409
Current Account	-5.312	-0.795	-2.014	-8.665	12.251	14.981	5.385	5.954
Overall Balance	0.184	0.211	-1.208	7.039	23.790	19.864	22.090	15.109
Foreign Exchange Rate (KRW/USD) *1	607.43	870.02	707.76	771.27	1,130.96	1,024.12	954.79	929.26
Purchasing Power Parity (KRW/International Dollar) *1	384.77	443.68	530.91	690.04	748.82	788.92	760.67	749.88
Price Indices								
GDP Deflator (2000=100) *3	23.3	34.6	48.5	71.1	86.8	100.0	99.9	101.9
Producer Price Index (2000=100)*2	47.0	60.3	64.8	75.7	91.0	100.0	100.9	102.3
Consumer Price Index (2000=100)*2	28.2	39.7	51.7	69.9	84.9	100.0	102.2	104.8
Growth Rate (%) *3								
Real GDP	-1.49	6.80	9.16	9.17	8.49	3.96	5.18	5.11
Population	1.57	0.99	1.15	1.44	0.84	0.21	0.33	0.33
Price								
Producer Price Index	39.0	0.9	4.2	4.7	2.0	2.1	0.9	1.4
Consumer Price Index	28.7	2.5	8.6	4.5	2.3	2.8	2.2	2.5

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note             : N.A. means "not available"  
                  : KRW means Won, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.10 Malaysia

Energy Balance Table of Malaysia in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	492	-	34,514	2,475	-	-	-	33	91
<b>2 Import</b>	7,203	-	9,597	8,445	4,021	-	-	47	1,456
<b>3 Export</b>	-233	-	-17,023	-9,768	-1,555	-	-	-194	-872
<b>4 International Marine Bunkers</b>	-	-	-	-70	-	-	-	-	-17
<b>5 Stock Changes</b>	108	-	-155	329	68	-	-	7	45
<b>6 Total Primary Energy Supply</b>	7,570	-	26,932	1,412	2,534	-	-	-107	702
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-6,400	-	-26,667	23,840	8,416	-	-	230	8,627
8.1 Main Activity Producer	-6,400	-	-	-513	-	-	-	-	-314
8.2 Autoproducers	-	-	-	-83	-	-	-	-	-83
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-26,667	25,280	8,416	-	-	230	9,024
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-844	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-6	-	-266	-449	-205	-	-	-50	172
<b>11 Total Final Energy Consumption</b>	1,163	-	-	24,803	10,746	-	-	74	9,501
<b>12 Industry Sector</b>	1,163	-	-	6,059	47	-	-	26	3,981
<b>13 Transport Sector</b>	-	-	-	15,551	10,694	-	-	-	4,854
<b>14 Other Sector</b>	-	-	-	2,348	4	-	-	48	667
14.1 Residential & Commercial	-	-	-	2,082	-	-	-	48	422
14.2 Agriculture	-	-	-	266	4	-	-	-	245
14.3 Other	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	845	-	-	-	-	-

Energy Balance Table of Malaysia in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	486	-	34,986	2,087	-	-	-	45	99
<b>2 Import</b>	5,829	-	8,043	7,726	3,482	-	-	90	1,273
<b>3 Export</b>	-60	-	-17,330	-9,520	-1,237	-	-	-544	-1,162
<b>4 International Marine Bunkers</b>	-	-	-	-88	-	-	-	-	-64
<b>5 Stock Changes</b>	-234	-	103	351	29	-	-	6	314
<b>6 Total Primary Energy Supply</b>	6,020	-	25,802	556	2,274	-	-	-403	460
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-5,095	-	-24,971	21,795	7,540	-	-	528	8,095
8.1 Main Activity Producer	-5,095	-	-	-787	-	-	-	-	-617
8.2 Autoproducers	-	-	-	-33	-	-	-	-	-33
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-24,971	23,459	7,540	-	-	528	8,745
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-844	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	215	-	-831	11	-152	-	-	-48	-19
<b>11 Total Final Energy Consumption</b>	1,141	-	-	22,361	9,662	-	-	77	8,535
<b>12 Industry Sector</b>	1,141	-	-	5,129	16	-	-	29	3,258
<b>13 Transport Sector</b>	-	-	-	14,689	9,643	-	-	-	5,043
<b>14 Other Sector</b>	-	-	-	2,543	3	-	-	48	234
14.1 Residential & Commercial	-	-	-	1,606	-	-	-	48	-
14.2 Agriculture	-	-	-	238	3	-	-	-	234
14.3 Other	-	-	-	699	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	-	-	-	-	-	-

Energy Balance Table of Malaysia in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	2,059	-	-	291	50,961	558	-	-	-	-	-	89,000
1,922	320	-	-	680	4,922	-	-	-	-	-	-	30,167
-1,340	-2,083	-	-	-3,724	-27,016	-	-	-	-	-195	-	-54,236
-48	-	-	-	-5	-	-	-	-	-	-	-	-70
-	3	-	-	206	-	-	-	-	-	-	-	282
534	299	-	-	-2,552	28,866	558	-	-	-	-195	-	65,143
-	-	-	-	-	-	-	-	-	-	-	-	-
1,789	1,223	97	-	3,457	-18,930	-558	-	-	-	8,714	-	-20,001
-199	-	-	-	-	-11,298	-558	-	-	-	8,253	-	-10,516
-	-	-	-	-	-1,032	-	-	-	-	461	-	-655
-	-	-	-	-	-6,600	-	-	-	-	-	-	-6,600
1,988	1,227	937	-	3,457	-	-	-	-	-	-	-	-1,387
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-4	-839	-	-	-	-	-	-	-	-	-	-844
-	-	-	-	-	-791	-	-	-	-	-610	-	-1,401
-123	-72	-88	-	-83	247	-	-	-	-	-230	-	-704
2,200	1,450	9	-	822	9,392	-	-	-	-	7,680	-	43,038
1,903	92	9	-	-	5,403	-	-	-	-	3,585	-	16,210
3	-	-	-	-	133	-	-	-	-	3	-	15,688
294	1,335	-	-	-	1,943	-	-	-	-	4,091	-	8,382
278	1,335	-	-	-	31	-	-	-	-	4,091	-	6,204
17	-	-	-	-	-	-	-	-	-	-	-	266
-	-	-	-	-	1,913	-	-	-	-	-	-	1,913
-	23	-	-	822	1,913	-	-	-	-	-	-	2,758

Energy Balance Table of Malaysia in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	1,624	-	-	319	49,449	554	-	-	-	-	-	87,561
2,225	308	-	-	348	2,895	-	-	-	-	-	-	24,493
-2,197	-1,590	-	-	-2,790	-25,957	-	-	-	-	-	-	-52,868
-24	-	-	-	-	-	-	-	-	-	-	-	-88
-10	-11	-	-	22	-	-	-	-	-	-	-	220
-5	331	-	-	-2,101	26,386	554	-	-	-	-	-	59,318
-	-	-	-	-	-	-	-	-	-	-	-	-
1,762	1,113	9	-	2,749	-17,507	-554	-	-	-	7,721	-	-18,610
-169	-	-	-	-	-10,773	-554	-	-	-	7,238	-	-9,971
-	-	-	-	-	-1,208	-	-	-	-	484	-	-758
-	-	-	-	-	-4,809	-	-	-	-	-	-	-4,809
1,932	1,117	848	-	2,749	-	-	-	-	-	-	-	-1,512
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-4	-839	-	-	-716	-	-	-	-	-	-	-1,560
-	-	-	-	-	-784	-	-	-	-	-273	-	-1,057
126	76	3	-	24	46	-	-	-	-	-180	-	-739
1,883	1,520	12	-	672	8,142	-	-	-	-	7,268	-	38,912
1,645	169	12	-	-	6,168	-	-	-	-	3,473	-	15,911
3	-	-	-	-	105	-	-	-	-	5	-	14,799
235	1,351	-	-	672	25	-	-	-	-	3,790	-	6,359
235	1,324	-	-	-	25	-	-	-	-	3,790	-	5,422
-	-	-	-	-	-	-	-	-	-	-	-	238
-	27	-	-	672	-	-	-	-	-	-	-	699
-	-	-	-	-	1,844	-	-	-	-	-	-	1,844

## Major Energy Indicators of Malaysia

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	10,553	14,110	20,972	33,390	51,492	61,730	59,318	65,143
Indigenous Production	16,072	32,137	46,529	62,388	79,473	91,969	87,561	89,000
Import	6,752	6,731	9,708	11,128	16,271	23,687	24,493	30,167
Export	-11,759	-24,945	-35,090	-39,423	-43,637	-54,323	-52,868	-54,236
Final Energy Consumption	6,385	8,612	13,146	22,164	29,697	37,536	38,912	43,038
Industry	2,870	3,489	5,276	8,060	11,401	14,960	15,911	16,210
Transport	2,398	3,377	5,386	7,827	12,070	15,319	14,799	15,688
Residential & Commercial	826	1,123	1,646	2,837	3,867	4,498	5,422	6,204
Agriculture	-	-	-	446	104	101	238	266
Non-energy	269	604	838	2,994	2,249	2,027	1,844	2,758
<b>Coal, Coal Products</b>								
Primary Energy Supply	53	362	1,355	1,612	2,308	6,620	6,020	7,570
Indigenous Production	-	-	70	85	242	408	486	492
Import	53	362	1,424	1,588	1,943	6,277	5,829	7,203
Export	-	-	-28	-50	-19	-42	-60	-233
Transformation Sector	-	-	-813	-957	-1,495	-5,260	-5,095	-6,400
Power Generation	-	-	-813	-957	-1,495	-5,260	-5,095	-6,400
Final Energy Consumption	53	362	513	712	991	1,280	1,141	1,163
Industry	53	362	513	712	991	1,280	1,141	1,163
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	5,783	7,320	10,024	17,476	24,137	26,799	25,802	26,932
Indigenous Production	13,707	22,187	30,629	35,090	33,835	36,746	34,986	34,514
Import	4,034	2,302	2,244	2,116	7,709	8,242	8,043	9,597
Export	-11,619	-17,338	-22,949	-19,833	-17,254	-19,073	-17,330	-17,023
Transformation Sector	-5,901	-7,579	-9,980	-16,960	-22,164	-24,551	-24,971	-26,667
Petroleum Refineries	-5,901	-7,579	-9,980	-16,960	-22,164	-24,551	-24,971	-26,667
<b>Petroleum Products</b>								
Primary Energy Supply	2,353	2,131	2,454	-191	-1,922	1,400	556	1,412
Import	2,658	4,062	6,031	7,411	6,619	7,954	7,726	8,445
Export	-132	-1,949	-3,413	-7,261	-8,533	-8,417	-9,520	-9,768
Transformation Sector	3,347	5,011	7,425	16,669	21,634	20,774	21,795	23,840
Power Generation	-2,346	-2,519	-2,989	-2,338	-966	-575	-820	-596
Petroleum Refineries	5,693	7,530	10,414	16,686	20,954	21,349	23,459	25,280
Final Energy Consumption	5,550	6,656	9,825	16,142	19,581	22,995	22,361	24,803
Industry	2,432	2,402	3,481	4,945	5,278	5,496	5,129	6,059
Transport	2,398	3,377	5,386	7,822	12,059	15,228	14,689	15,551
Residential & Commercial	429	472	729	999	1,398	906	1,606	2,082
Agriculture	-	-	-	446	104	101	238	266
Non-energy	269	386	229	1,930	737	632	-	845
<b>Natural Gas</b>								
Primary Energy Supply	2,237	3,971	6,801	13,960	26,370	26,414	26,386	28,866
Indigenous Production	2,245	9,629	15,487	26,678	44,797	51,992	49,449	50,961
Import	-	-	-	-	-	1,213	2,895	4,922
Export	-8	-5,658	-8,686	-12,264	-17,831	-26,791	-25,957	-27,016
Transformation Sector	-33	-1,659	-2,397	-12,258	-20,971	-19,189	-17,507	-18,930
Power Generation	-33	-539	-1,361	-6,414	-12,110	-11,948	-11,982	-12,330
Final Energy Consumption	35	515	1,093	1,935	3,862	6,322	8,142	9,392
Industry	1	250	452	577	2,327	4,815	6,168	5,403
Transport	-	-	-	5	7	86	105	133
Residential & Commercial	34	47	32	289	16	26	25	31
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	218	609	1,064	1,512	1,395	1,844	1,913
<b>Electricity</b>								
Power Generation	864	1,285	1,979	3,909	5,952	7,508	7,721	8,714
Thermal	744	964	1,636	3,374	5,353	7,011	7,167	8,156
Hydro	120	321	343	535	599	497	554	558
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	747	1,079	1,715	3,375	5,263	6,940	7,268	7,680
Industry	384	475	830	1,826	2,805	3,369	3,473	3,585
Transport	-	-	-	-	4	5	5	3
Residential & Commercial	363	604	885	1,549	2,453	3,565	3,790	4,091
Agriculture	-	-	-	-	-	-	-	-



## Major Economic Indicators of Malaysia

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	13.76	15.68	18.10	20.59	23.27	25.65	26.11	26.55
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	26.41	33.88	47.21	74.22	93.79	118.22	125.05	132.99
Real Term (Billions of 2000 Price and 2000 PPP)	59.57	76.40	106.45	167.37	211.50	266.60	282.00	299.90
Nominal (Billions of Current USD)	24.94	31.77	44.02	88.83	93.79	137.95	156.41	186.72
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	1,919	2,161	2,608	3,604	4,030	4,609	4,789	5,009
Real Term (2000 Price and 2000 PPP)	4,328	4,874	5,880	8,127	9,088	10,393	10,799	11,296
Nominal (Current USD)	1,812	2,027	2,432	4,314	4,030	5,378	5,990	7,033
Nominal GDP & its Components (Billions of Current MYR) *1								
Gross Domestic Product	54.29	78.89	119.08	222.47	356.40	522.45	573.74	641.86
Household Final Consumption Expenditure, etc.	27.93	41.76	61.69	106.61	155.94	234.23	257.41	292.72
General Government Final Consumption Expenditure	8.68	11.67	16.43	27.53	36.23	64.52	68.53	78.30
Gross Fixed Capital Formation	16.26	22.65	39.35	96.97	90.14	107.19	119.60	139.14
Stock Change	-1.38	-3.05	-0.81	0.12	5.62	-2.77	0.58	1.65
Exports of Goods and Services	30.77	42.67	88.76	209.32	427.00	613.69	669.78	707.16
Imports of Goods and Services	29.46	38.72	86.24	218.08	358.53	494.42	542.15	577.11
Real GDP & its Components (Billions of 1987 MYR) *1								
Gross Domestic Product	100.38	128.75	179.38	282.04	356.40	449.25	475.19	505.35
Household Final Consumption Expenditure, etc.	58.14	69.54	90.51	134.05	155.94	216.25	230.22	255.03
General Government Final Consumption Expenditure	14.66	17.82	21.58	31.39	36.23	58.40	61.26	65.30
Gross Fixed Capital Formation	24.72	31.74	49.62	113.24	90.14	99.27	107.12	117.38
Stock Change	0.50	-1.25	-1.16	0.15	5.62	-3.08	0.11	-5.92
Exports of Goods and Services	49.02	69.08	133.15	280.77	427.00	554.26	592.90	617.63
Imports of Goods and Services	50.09	62.98	121.42	289.12	358.53	475.84	516.41	544.06
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	20.4	18.5	15.7	10.0	8.6	8.0	7.9	7.6
Industry	37.5	38.6	41.8	45.0	48.3	46.5	45.9	44.6
Services, etc.	41.4	42.3	42.2	44.9	43.1	45.5	46.1	47.8
Industrial Production Index (2000=100) *2	13.4	18.5	31.6	52.9	78.4	100.0	104.5	106.9
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	12.958	15.442	29.452	73.914	98.229	140.980	160.676	176.211
Imports, c.i.f.	10.820	12.301	29.258	77.691	81.963	114.625	131.152	146.982
Balance of Payments (Billions of Current USD) *2								
Trade Balance	2.393	3.573	2.525	-0.103	20.827	33.156	36.698	37.328
Current Account	-0.266	-0.600	-0.870	-8.644	8.488	19.980	25.488	28.931
Overall Balance	0.464	1.148	1.951	-1.763	-1.009	3.620	6.864	13.144
Foreign Exchange Rate (MYR/USD) *1	2.1769	2.4830	2.7049	2.5044	3.8000	3.7871	3.6682	3.4376
Purchasing Power Parity (MYR/International Dollar) *1	1.6878	1.4822	1.3708	1.4433	1.6851	1.7339	1.7452	1.7884
Price Indices								
GDP Deflator (1987=100) *3	54.1	61.3	66.4	78.9	100.0	116.3	120.7	127.0
Producer Price Index (2000=100) *2	N.A.	56.0	61.2	72.3	83.8	100.0	106.7	111.6
Consumer Price Index (2000=100) *2	47.2	59.2	64.7	78.6	91.7	100.0	103.6	105.7
Growth Rate (%) *3								
Real GDP	7.44	-1.12	9.01	9.83	8.86	5.33	5.77	6.35
Population	2.42	2.80	2.84	2.56	2.29	1.83	1.80	1.67
Price								
Producer Price Index	N.A.	-2.1	0.9	5.5	3.1	6.9	6.7	4.6
Consumer Price Index	6.7	0.3	2.6	3.5	1.5	3.0	3.6	2.0

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : MYR means Malaysian Ringgit, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.11 Mexico

Energy Balance Table of Mexico in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	6,000	-	182,296	-	-	-	-	-	-
<b>2 Import</b>	2,677	174	557	25,747	16,543	325	168	-	4,621
<b>3 Export</b>	-4	-2	-93,232	-5,650	-3,303	-	-165	-	-2,102
<b>4 International Marine Bunkers</b>	-	-	-	-872	-	-	-	-	-772
<b>5 Stock Changes</b>	-325	577	-233	-522	-352	-	-21	-2	-112
<b>6 Total Primary Energy Supply</b>	8,348	749	89,388	18,702	12,887	325	-18	-2	1,635
<b>7 Transfers</b>	-	-	-14,032	9,938	-	-	71	-100	-
<b>8 Total Transformation Sector</b>	-8,206	1,117	-74,708	57,282	23,074	1,434	3,443	341	17,606
<b>8.1 Main Activity Producer</b>	-6,795	-	-	-13,077	-	-	-	-	-190
<b>8.2 Autoproducers</b>	-	-104	-	-529	-	-	-	-	-529
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-74,708	70,889	23,074	1,434	3,443	341	18,326
<b>8.5 Coal Transformation</b>	-1,411	1,221	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-25	-	-6,647	-339	-	-	-	-726
<b>10. Discrepancy</b>	0	-	-648	-2,787	-1,950	-1	-357	0	-572
<b>11 Total Final Energy Consumption</b>	143	1,840	-	76,489	33,673	1,757	3,139	239	17,943
<b>12 Industry Sector</b>	143	1,840	-	5,296	-	-	-	12	1,100
<b>13 Transport Sector</b>	-	-	-	52,747	33,673	-	3,139	-	14,262
<b>14 Other Sector</b>	-	-	-	11,926	-	-	-	227	2,581
<b>14.1 Residential &amp; Commercial</b>	-	-	-	9,229	-	-	-	227	101
<b>14.2 Agriculture</b>	-	-	-	2,698	-	-	-	-	2,481
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	6,519	-	1,757	-	-	-

Energy Balance Table of Mexico in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	5,510	-	190,482	-	-	-	-	-	-
<b>2 Import</b>	3,696	205	465	18,812	11,248	230	-	-	3,553
<b>3 Export</b>	-2	-2	-103,208	-4,647	-3,591	-	-306	-	-607
<b>4 International Marine Bunkers</b>	-	-	-	-879	-	-	-	-	-774
<b>5 Stock Changes</b>	-868	542	-310	26	82	-	-70	2	-157
<b>6 Total Primary Energy Supply</b>	8,337	744	87,429	13,311	7,740	230	-376	2	2,015
<b>7 Transfers</b>	-	-	-12,422	10,557	-	-	42	-59	-
<b>8 Total Transformation Sector</b>	-8,216	1,083	-75,006	54,579	22,107	1,220	3,379	346	17,578
<b>8.1 Main Activity Producer</b>	-6,812	-	-	-14,538	-	-	-	-	-423
<b>8.2 Autoproducers</b>	-	-107	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-75,006	69,116	22,107	1,220	3,379	346	18,001
<b>8.5 Coal Transformation</b>	-1,404	1,189	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-25	-	-6,190	-325	-	-	-	-713
<b>10. Discrepancy</b>	-0	-	-0	611	2,292	-0	-216	-24	-1,801
<b>11 Total Final Energy Consumption</b>	121	1,802	-	72,867	31,813	1,450	2,828	266	17,078
<b>12 Industry Sector</b>	121	1,802	-	4,668	-	-	-	20	1,048
<b>13 Transport Sector</b>	-	-	-	49,889	31,813	-	2,828	-	13,574
<b>14 Other Sector</b>	-	-	-	11,947	-	-	-	246	2,456
<b>14.1 Residential &amp; Commercial</b>	-	-	-	9,366	-	-	-	246	96
<b>14.2 Agriculture</b>	-	-	-	2,581	-	-	-	-	2,361
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	6,363	-	1,450	-	-	-

Energy Balance Table of Mexico in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	42,973	2,346	2,716	6,499	8,240	-	-	251,069	
811	3,279	-	-	-	8,842	-	-	-	-	24	-	38,021	
-41	-38	-	-	-	-1,226	-	-	-	-	-125	-	-100,239	
-99	-	-	-	-1	-	-	-	-	-	-	-	-872	
-50	-14	-	-	29	-84	-	-	-	-	-	-	-587	
621	3,227	-	-	28	50,505	2,346	2,716	6,499	8,240	-101	-	187,392	
-	7,041	-	2,926	-	-	-	-	-	-	-	-	-4,095	
4,255	1,073	3,259	-	2,796	-26,276	-2,346	-2,716	-6,391	-1,172	22,141	-	-41,273	
-12,309	-	-	-	-578	-19,444	-2,326	-2,716	-6,389	-	20,000	-	-30,747	
-	-	-	-	-	-6,832	-20	-	-2	-1,172	2,142	-	-6,517	
-	-	-	-	-	-	-	-	-	-	-	-	-	
16,565	1,073	3,259	-	3,374	-	-	-	-	-	-	-	-3,819	
-	-	-	-	-	-	-	-	-	-	-	-	-190	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-1,996	-195	-3,259	-	-130	-13,750	-	-	-	-	-5,151	-	-25,573	
-681	485	-	-	289	4,914	-0	-	0	-	-	-	1,479	
2,200	11,630	-	2,926	2,983	15,392	-	-	108	7,069	16,889	-	117,930	
2,098	921	-	-	1,166	10,676	-	-	-	1,176	9,877	-	29,008	
102	1,571	-	-	-	1,170	-	-	-	-	102	-	54,019	
-	9,118	-	-	-	1,099	-	-	108	5,892	6,910	-	25,936	
-	8,901	-	-	-	1,099	-	-	108	5,892	6,180	-	22,508	
-	217	-	-	-	-	-	-	-	-	730	-	3,428	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	19	-	2,926	1,816	2,448	-	-	-	-	-	-	8,967	

Energy Balance Table of Mexico in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	40,534	2,614	2,832	5,848	8,163	-	-	255,984	
747	3,033	-	-	-	8,291	-	-	-	-	45	-	31,513	
-42	-78	-	-	-23	-296	-	-	-	-	-112	-	-108,267	
-104	-	-	-	-1	-	-	-	-	-	-	-	-879	
124	53	-	-	-9	37	-	-	-	-	-	-	-574	
725	3,008	-	-	-32	48,565	2,614	2,832	5,848	8,163	-67	-	177,776	
-	7,427	-	3,147	-	-	-	-	-	-	-	-	-1,866	
2,864	1,146	3,348	-	2,591	-26,741	-2,614	-2,832	-5,755	-1,125	21,470	-	-45,157	
-13,376	-	-	-	-738	-19,444	-2,606	-2,832	-5,753	-	19,357	-	-32,628	
-	-	-	-	-	-7,297	-8	-	-2	-1,125	2,113	-	-6,425	
-	-	-	-	-	-	-	-	-	-	-	-	-	
16,240	1,146	3,348	-	3,330	-	-	-	-	-	-	-	-5,890	
-	-	-	-	-	-	-	-	-	-	-	-	-214	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-1,464	-209	-3,348	-	-131	-11,931	-	-	-	-	-4,991	-	-23,138	
-185	418	-	-	127	4,782	-	-	-	-0	-	-	5,393	
1,940	11,790	-	3,147	2,555	14,676	-	-	93	7,038	16,412	-	113,008	
1,859	937	-	-	805	10,397	-	-	-	1,135	9,551	-	27,674	
81	1,593	-	-	-	1,006	-	-	-	-	102	-	50,998	
-	9,245	-	-	-	1,059	-	-	93	5,903	6,758	-	25,760	
-	9,024	-	-	-	1,059	-	-	93	5,903	6,014	-	22,435	
-	220	-	-	-	-	-	-	-	-	745	-	3,326	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	16	-	3,147	1,750	2,214	-	-	-	-	-	-	8,577	

## Major Energy Indicators of Mexico

	1980	1985	1990	1995	2000	2005	2006	2007
ktoe								
<b>Total</b>								
Primary Energy Supply	97,158	109,215	122,770	131,080	150,162	175,916	177,776	187,392
Indigenous Production	149,022	192,211	193,005	200,512	225,938	258,278	255,984	251,069
Import	1,792	2,725	6,196	8,869	24,432	28,400	31,513	38,021
Export	-52,824	-82,145	-75,644	-77,994	-97,241	-109,740	-108,267	-100,239
Final Energy Consumption	65,089	77,200	88,351	94,395	100,610	108,316	113,008	117,930
Industry	18,331	26,030	27,686	26,265	29,794	27,273	27,674	29,008
Transport	23,518	24,850	31,290	35,253	37,963	47,450	50,998	54,019
Residential & Commercial	12,963	14,864	17,006	20,097	20,780	21,841	22,435	22,508
Agriculture	2,288	2,206	2,272	2,327	2,784	3,176	3,326	3,428
Non-energy	5,063	9,250	9,405	10,453	9,289	8,576	8,577	8,967
<b>Coal, Coal Products</b>								
Primary Energy Supply	2,355	3,205	3,467	5,367	6,846	9,113	9,081	9,097
Indigenous Production	1,725	2,901	3,387	4,325	5,415	5,159	5,510	6,000
Import	642	579	235	736	1,699	3,787	3,900	2,851
Export	-50	-60	-6	-1	-4	-4	-4	-6
Transformation Sector	-777	-1,165	-1,836	-3,497	-5,440	-7,348	-7,133	-7,089
Power Generation	-	-906	-1,725	-3,347	-4,782	-7,067	-6,919	-6,899
Final Energy Consumption	1,549	1,625	1,555	1,843	1,378	1,741	1,922	1,983
Industry	1,549	1,612	1,532	1,843	1,378	1,741	1,922	1,983
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	12	23	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	58,310	67,010	82,322	83,689	78,340	92,116	87,429	89,388
Indigenous Production	102,752	142,807	152,754	155,284	171,114	197,288	190,482	182,296
Import	-	-	-	-	352	382	465	557
Export	-43,934	-75,453	-70,432	-71,595	-92,206	-105,477	-103,208	-93,232
Transformation Sector	-53,022	-67,340	-69,254	-71,530	-65,956	-79,764	-75,006	-74,708
Petroleum Refineries	-53,007	-63,633	-69,254	-71,530	-65,956	-79,764	-75,006	-74,708
<b>Petroleum Products</b>								
Primary Energy Supply	-1,507	-4,913	-135	-62	13,320	11,710	13,311	18,702
Import	1,097	2,099	5,542	6,598	19,919	16,784	18,812	25,747
Export	-2,286	-6,612	-5,039	-6,047	-4,810	-3,937	-4,647	-5,650
Transformation Sector	45,570	56,922	50,719	52,808	41,788	54,656	54,579	57,282
Power Generation	-9,784	-12,579	-16,118	-16,885	-22,944	-17,622	-14,538	-13,606
Petroleum Refineries	48,726	59,384	66,837	69,693	64,732	72,278	69,116	70,889
Final Energy Consumption	39,064	47,103	56,670	59,200	62,961	69,676	72,867	76,489
Industry	5,251	7,065	8,994	7,600	7,667	5,053	4,668	5,296
Transport	23,481	24,794	31,221	34,514	37,233	46,621	49,889	52,747
Residential & Commercial	5,491	6,594	7,903	9,773	9,367	9,000	9,366	9,229
Agriculture	1,966	1,780	1,695	1,752	2,104	2,423	2,581	2,698
Non-energy	2,876	6,870	6,855	5,561	6,590	6,578	6,363	6,519
<b>Natural Gas</b>								
Primary Energy Supply	28,582	32,817	22,698	24,879	33,521	43,202	48,565	50,505
Indigenous Production	35,137	35,362	22,328	23,629	31,350	35,953	40,534	42,973
Import	-	35	370	1,435	2,370	7,440	8,291	8,842
Export	-6,555	-	-	-185	-204	-211	-296	-1,226
Transformation Sector	-10,175	-9,635	-3,432	-5,356	-8,980	-20,498	-26,741	-26,276
Power Generation	-2,837	-1,957	-3,432	-5,356	-8,980	-20,498	-26,741	-26,276
Final Energy Consumption	12,840	14,971	14,166	15,242	15,153	13,787	14,676	15,392
Industry	7,532	12,245	10,828	8,928	11,035	9,999	10,397	10,676
Transport	-	-	-	654	638	728	1,006	1,170
Residential & Commercial	470	633	811	768	781	1,062	1,059	1,099
Agriculture	-	-	-	-	-	-	-	-
Non-energy	1,912	2,093	2,527	4,891	2,699	1,998	2,214	2,448
<b>Electricity</b>								
Power Generation	5,320	7,339	10,675	13,545	17,512	20,813	21,470	22,141
Thermal	3,880	5,096	7,891	8,977	12,520	15,618	16,024	17,080
Hydro	1,439	2,243	2,019	2,367	2,849	2,379	2,614	2,346
Nuclear	-	-	765	2,200	2,142	2,816	2,832	2,716
Final Energy Consumption	4,497	6,051	8,617	10,280	13,943	15,837	16,412	16,889
Industry	2,458	3,383	4,592	5,888	8,551	9,202	9,551	9,877
Transport	37	56	69	84	92	102	102	102
Residential & Commercial	1,680	2,186	2,688	3,732	4,620	5,781	6,014	6,180
Agriculture	322	427	577	575	679	753	745	730

## Major Economic Indicators of Mexico

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	67.57	75.47	83.23	91.15	97.97	103.09	104.22	105.28
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	345.56	380.38	413.33	445.85	581.43	636.77	667.43	688.81
Real Term (Billions of 2000 Price and 2000 PPP)	535.06	588.97	639.98	690.34	900.27	985.96	1,033.43	1,066.53
Nominal (Billions of Current USD)	194.77	184.49	262.71	286.70	581.43	846.99	948.86	1,022.82
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	5,114	5,040	4,966	4,892	5,935	6,177	6,404	6,543
Real Term (2000 Price and 2000 PPP)	7,919	7,805	7,690	7,574	9,190	9,564	9,916	10,130
Nominal (Current USD)	2,883	2,445	3,157	3,146	5,935	8,216	9,104	9,715
Nominal GDP & its Components (Billions of Current MXN) *1								
Gross Domestic Product	4.47	47.39	738.90	1,840.43	5,497.74	9,230.40	10,341.87	11,177.53
Household Final Consumption Expenditure, etc.	2.91	30.57	514.12	1,232.00	3,682.55	6,142.08	6,709.61	7,312.58
General Government Final Consumption Expenditure	0.45	4.37	61.95	191.98	612.62	996.66	1,082.04	1,143.49
Gross Fixed Capital Formation	1.11	9.05	132.11	296.71	1,174.30	1,849.84	2,143.03	2,322.40
Stock Change	0.11	0.99	38.88	70.80	137.90	345.04	505.61	579.96
Exports of Goods and Services	0.48	7.31	137.44	558.80	1,700.95	2,507.35	2,904.14	3,164.34
Imports of Goods and Services	0.58	4.90	145.60	509.86	1,810.58	2,641.66	3,037.58	3,345.24
Real GDP & its Components (Billions of 1993 MXN) *1								
Gross Domestic Product	4,401.39	4,844.82	5,264.47	5,678.67	7,405.55	8,110.44	8,500.94	8,773.22
Household Final Consumption Expenditure, etc.	2,571.46	2,718.18	3,074.12	3,234.39	4,783.16	5,580.85	5,891.04	6,140.45
General Government Final Consumption Expenditure	544.76	677.15	726.14	810.49	907.62	899.45	902.39	911.21
Gross Fixed Capital Formation	996.27	793.19	884.23	815.96	1,520.51	1,645.21	1,803.70	1,904.73
Stock Change	447.38	221.80	178.86	95.79	446.47	138.63	121.23	71.22
Exports of Goods and Services	256.45	403.95	543.86	994.52	1,907.59	2,280.31	2,527.15	2,683.05
Imports of Goods and Services	481.67	305.05	572.45	827.56	2,016.13	2,434.00	2,744.57	2,937.44
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	4.6	4.8	4.4	4.3	3.6	3.6	3.6	3.5
Industry	31.2	30.1	31.3	30.3	33.0	30.9	31.0	30.6
Services, etc.	57.4	58.8	59.0	59.8	58.6	60.3	60.2	60.6
Industrial Production Index (2000=100) *2	56.4	59.6	67.2	70.2	99.7	100.0	105.7	108.2
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	18.031	26.757	40.711	79.542	166.367	214.207	249.961	271.821
Imports, c.i.f.	22.144	19.116	43.548	75.858	182.702	232.245	268.093	295.201
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-3.056	8.399	-0.881	7.089	-8.337	-7.587	-6.133	-10.074
Current Account	-10.422	0.800	-7.451	-1.576	-18.708	-4.384	-4.389	-8.345
Overall Balance	0.817	-2.729	2.218	-16.312	7.126	6.965	-1.303	10.250
Foreign Exchange Rate (MXN/USD) *1	0.0230	0.2569	2.8126	6.4194	9.4556	10.8979	10.8992	10.9282
Purchasing Power Parity (MXN/International Dollar) *1	0.0167	0.1248	1.4342	2.9287	6.1068	7.1269	7.3806	7.5274
Price Indices								
GDP Deflator (1993=100) *3	0.1	1.0	14.0	32.4	74.2	113.8	121.7	127.4
Wholesale Price Index (2000=100) *2	0.3	1.2	15.2	32.9	74.0	100.0	106.6	110.5
Consumer Price Index (2000=100) *2	0.1	1.0	14.6	32.8	78.6	100.0	103.6	107.7
Growth Rate (%)								
Real GDP *3	9.23	2.59	5.07	-6.22	6.60	3.20	4.81	3.20
Population *3	2.51	2.10	1.91	1.79	1.43	1.02	1.10	1.02
Price *2								
Wholesale Price Index	24.5	56.6	21.7	38.6	7.8	4.2	6.6	3.6
Consumer Price Index	26.4	57.7	26.7	35.0	9.5	4.0	3.6	4.0

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note             : N.A. means "not available"  
                  : MXN means Mexican Nuevo Peso, USD means United States Dollar  
                  : PPP means Purchasing Power Parity





## 3.12 New Zealand

## Energy Balance Table of New Zealand in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	2,828	-	2,099	-	-	-	-	-	-
<b>2 Import</b>	385	-	4,703	2,485	1,100	-	258	-	898
<b>3 Export</b>	-1,461	-	-1,623	-123	-15	-	-	-	-
<b>4 International Marine Bunkers</b>	-	-	-	-311	-	-	-	-	-40
<b>5 Stock Changes</b>	-224	-	-102	-41	-32	-	-1	-2	-12
<b>6 Total Primary Energy Supply</b>	1,528	-	5,077	2,010	1,054	-	257	-2	847
<b>7 Transfers</b>	-	-	-109	114	-	-	-	1	1
<b>8 Total Transformation Sector</b>	-994	-	-4,891	5,078	1,516	-	890	3	1,761
<b>8.1 Main Activity Producer</b>	-584	-	-	-	-	-	-	-	-
<b>8.2 Autoproducers</b>	-15	-461	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-4,891	5,078	1,516	-	890	3	1,761
<b>8.5 Coal Transformation</b>	-395	461	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-348	-	-	-	-	-
<b>10. Discrepancy</b>	1	-	-78	68	26	-	54	1	-12
<b>11 Total Final Energy Consumption</b>	535	-	-	6,921	2,595	-	1,201	3	2,597
<b>12 Industry Sector</b>	402	-	-	428	39	-	-	3	308
<b>13 Transport Sector</b>	-	-	-	5,812	2,527	-	1,201	-	2,021
<b>14 Other Sector</b>	133	-	-	395	29	-	-	-	268
<b>14.1 Residential &amp; Commercial</b>	100	-	-	155	7	-	-	-	49
<b>14.2 Agriculture</b>	33	-	-	150	20	-	-	-	130
<b>14.3 Other</b>	-	-	-	90	1	-	-	-	89
<b>15 Non-energy</b>	-	-	-	286	-	-	-	-	-

## Energy Balance Table of New Zealand in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	3,471	-	1,044	-	-	-	-	-	-
<b>2 Import</b>	630	-	4,779	2,097	945	-	208	-	766
<b>3 Export</b>	-1,954	-	-741	-77	-	-	-	-	-
<b>4 International Marine Bunkers</b>	-	-	-	-299	-	-	-	-	-44
<b>5 Stock Changes</b>	-54	-	102	-41	29	-	16	-	-49
<b>6 Total Primary Energy Supply</b>	2,093	-	5,184	1,680	974	-	224	-	674
<b>7 Transfers</b>	-	-	-147	150	-18	-	-21	1	-
<b>8 Total Transformation Sector</b>	-1,564	-	-5,295	5,290	1,579	-	966	2	1,846
<b>8.1 Main Activity Producer</b>	-1,143	-	-	-5	-	-	-	-	-5
<b>8.2 Autoproducers</b>	-12	-482	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-5,295	5,295	1,579	-	966	2	1,851
<b>8.5 Coal Transformation</b>	-409	482	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-360	-	-	-	-	-
<b>10. Discrepancy</b>	-2	-	258	141	17	-	115	-	3
<b>11 Total Final Energy Consumption</b>	528	-	-	6,901	2,551	-	1,284	3	2,522
<b>12 Industry Sector</b>	382	-	-	379	11	-	-	3	291
<b>13 Transport Sector</b>	-	-	-	5,794	2,514	-	1,284	-	1,939
<b>14 Other Sector</b>	146	-	-	412	27	-	-	-	292
<b>14.1 Residential &amp; Commercial</b>	101	-	-	145	2	-	-	-	50
<b>14.2 Agriculture</b>	45	-	-	166	23	-	-	-	142
<b>14.3 Other</b>	-	-	-	101	1	-	-	-	100
<b>15 Non-energy</b>	-	-	-	316	-	-	-	-	-

Energy Balance Table of New Zealand in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,650	2,022	-	3,238	1,108	-	-	14,945
-	95	-	-	133	-	-	-	-	-	-	-	7,573
-108	-	-	-	-	-	-	-	-	-	-	-	-3,207
-272	-	-	-	-	-	-	-	-	-	-	-	-311
3	1	-	-	2	-1	-	-	-	-	-	-	-367
-376	96	-	-	135	3,649	2,022	-	3,238	1,108	-	-	18,633
-	114	-	-	-2	-	-	-	-	-	-	-	5
407	-	304	-	197	-2,074	-2,022	-	-2,997	-255	3,771	14	-4,371
-	-	-	-	-	-1,912	-2,022	-	-2,997	-40	3,592	-	-3,964
-	-	-	-	-	-162	-	-	-	-215	179	14	-660
-	-	-	-	-	-	-	-	-	-	-	-	-
407	-	304	-	197	-	-	-	-	-	-	-	187
-	-	-	-	-	-	-	-	-	-	-	-	66
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-304	-	-44	-126	-	-	-	-	-437	-14	-926
8	-9	-	-	-	-15	-	-	-0	0	-	-	-24
39	201	-	-	286	1,434	-	-	241	853	3,333	-	13,317
10	67	-	-	-	662	-	-	139	660	1,251	-	3,542
27	35	-	-	-	6	-	-	-	-	32	-	5,849
1	98	-	-	-	257	-	-	102	193	2,050	-	3,131
1	98	-	-	-	219	-	-	102	193	1,875	-	2,644
-	-	-	-	-	39	-	-	-	-	137	-	360
-	-	-	-	-	-	-	-	-	-	38	-	127
-	-	-	-	286	509	-	-	-	-	-	-	795

Energy Balance Table of New Zealand in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,279	2,009	-	3,153	1,078	-	-	14,034
-	44	-	-	133	-	-	-	-	-	-	-	7,506
-70	-7	-	-	-	-	-	-	-	-	-	-	-2,773
-255	-	-	-	-	-	-	-	-	-	-	-	-299
-35	-1	-	-	-1	-	-	-	-	-	-	-	7
-360	36	-	-	132	3,279	2,009	-	3,153	1,078	-	-	18,475
-	154	-	-	34	-	-	-	-	-	-	-	3
388	-	318	-	191	-1,826	-2,009	-	-2,914	-243	3,739	12	-4,809
-	-	-	-	-	-1,683	-2,009	-	-2,914	-39	3,569	-	-4,223
-	-	-	-	-	-144	-	-	-	-204	170	12	-659
-	-	-	-	-	-	-	-	-	-	-	-	-
388	-	318	-	191	-	-	-	-	-	-	-	-0
-	-	-	-	-	-	-	-	-	-	-	-	74
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-318	-	-42	-126	-	-	-	-	-437	-12	-936
4	2	-	-	-0	84	-	-	-	-0	-	-	481
32	193	-	-	316	1,410	-	-	239	835	3,302	-	13,214
7	67	-	-	-	611	-	-	138	642	1,247	-	3,399
23	33	-	-	-	4	-	-	-	-	30	-	5,827
1	92	-	-	-	296	-	-	101	194	2,025	-	3,174
1	92	-	-	-	256	-	-	101	194	1,798	-	2,595
-	-	-	-	-	40	-	-	-	-	127	-	377
-	-	-	-	-	-	-	-	-	-	101	-	201
-	-	-	-	316	499	-	-	-	-	-	-	814

## Major Energy Indicators of New Zealand

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	9,501	11,968	14,454	16,028	18,067	18,079	18,475	18,633
Indigenous Production	6,031	10,037	12,701	13,202	14,985	13,361	14,034	14,945
Import	4,058	3,150	3,816	5,106	5,931	7,399	7,506	7,573
Export	-86	-1,036	-1,694	-2,067	-2,552	-2,493	-2,773	-3,207
Final Energy Consumption	7,301	9,180	9,484	11,277	13,167	12,981	13,214	13,317
Industry	2,472	3,456	2,922	3,032	3,009	3,291	3,399	3,542
Transport	2,269	2,574	3,416	4,177	4,770	5,760	5,827	5,849
Residential & Commercial	1,964	2,054	1,930	2,099	2,519	2,612	2,595	2,644
Agriculture	448	447	240	263	327	363	377	360
Non-energy	148	648	843	1,595	2,426	716	814	795
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,113	1,034	1,133	1,126	1,042	2,003	2,093	1,528
Indigenous Production	1,179	1,330	1,389	2,108	2,333	3,057	3,471	2,828
Import	-	1	5	-	-	557	630	385
Export	-66	-297	-225	-983	-1,122	-1,684	-1,954	-1,461
Transformation Sector	-152	-237	-466	-525	-577	-1,621	-1,564	-994
Power Generation	-127	-223	-209	-246	-597	-1,654	-1,637	-1,060
Final Energy Consumption	851	907	678	609	464	486	528	535
Industry	556	661	552	395	353	364	382	402
Transport	2	2	-	2	-	-	-	-
Residential & Commercial	291	241	95	188	98	95	101	100
Agriculture	3	4	10	23	14	27	45	33
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	3,030	1,600	5,007	5,371	5,452	5,203	5,184	5,077
Indigenous Production	337	1,265	2,599	2,152	1,922	1,060	1,044	2,099
Import	2,746	990	3,293	4,168	4,724	4,829	4,779	4,703
Export	-	-658	-965	-1,053	-1,219	-622	-741	-1,623
Transformation Sector	-3,102	-1,610	-4,968	-5,335	-5,265	-5,096	-5,295	-4,891
Petroleum Refineries	-3,102	-1,610	-4,968	-5,335	-5,265	-5,096	-5,295	-4,891
<b>Petroleum Products</b>								
Primary Energy Supply	865	2,001	-314	590	842	1,627	1,680	2,010
Import	1,312	2,159	519	938	1,208	2,013	2,097	2,485
Export	-20	-80	-504	-31	-211	-186	-77	-123
Transformation Sector	2,865	1,513	4,888	4,900	5,266	5,435	5,290	5,078
Power Generation	-	-	-3	-1	-	-1	-5	-
Petroleum Refineries	2,865	1,513	4,891	4,901	5,266	5,436	5,295	5,078
Final Energy Consumption	3,660	3,515	4,400	5,248	5,794	6,840	6,901	6,921
Industry	488	321	273	308	315	367	379	428
Transport	2,256	2,444	3,354	4,140	4,731	5,716	5,794	5,812
Residential & Commercial	376	238	172	183	139	173	145	155
Agriculture	393	375	171	163	186	176	166	150
Non-energy	147	137	317	351	306	286	316	286
<b>Natural Gas</b>								
Primary Energy Supply	760	3,022	3,897	3,856	5,057	3,201	3,279	3,649
Indigenous Production	763	3,021	3,897	3,856	5,056	3,201	3,279	3,650
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-316	-1,550	-2,501	-1,657	-1,927	-1,743	-1,826	-2,074
Power Generation	-332	-1,344	-1,230	-1,046	-1,927	-1,743	-1,826	-2,074
Final Energy Consumption	407	1,355	1,295	2,017	3,093	1,298	1,410	1,434
Industry	311	593	531	535	497	533	611	662
Transport	8	126	57	31	2	4	4	6
Residential & Commercial	84	120	181	207	460	292	256	219
Agriculture	1	5	-	-	14	38	40	39
Non-energy	2	511	526	1,245	2,120	430	499	509
<b>Electricity</b>								
Power Generation	1,952	2,379	2,775	3,037	3,373	3,710	3,739	3,771
Thermal	303	702	768	693	1,276	1,703	1,731	1,748
Hydro	1,648	1,678	2,007	2,344	2,097	2,006	2,009	2,022
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	1,670	2,082	2,390	2,621	2,894	3,276	3,302	3,333
Industry	645	849	961	1,135	1,213	1,240	1,247	1,251
Transport	3	3	5	5	37	41	30	32
Residential & Commercial	971	1,166	1,365	1,396	1,532	1,758	1,798	1,875
Agriculture	51	64	59	77	113	121	127	137

## Major Economic Indicators of New Zealand

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	3.11	3.27	3.45	3.67	3.86	4.13	4.18	4.23
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	32.89	38.49	39.62	46.17	52.66	63.47	64.46	66.40
Real Term (Billions of 2000 Price and 2000 PPP)	50.08	58.60	60.32	70.30	80.17	96.64	98.15	101.10
Nominal (Billions of Current USD)	22.87	23.05	43.91	61.30	52.66	110.44	107.25	131.38
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	10,566	11,765	11,490	12,568	13,649	15,353	15,405	15,703
Real Term (2000 Price and 2000 PPP)	16,087	17,913	17,495	19,136	20,782	23,376	23,455	23,909
Nominal (Current USD)	7,346	7,046	12,736	16,689	13,649	26,715	25,629	31,072
Nominal GDP & its Components (Billions of Current NZD) *1								
Gross Domestic Product	23.48	46.64	73.61	93.42	115.91	156.85	165.38	178.77
Household Final Consumption Expenditure, etc.	13.90	27.22	44.64	54.55	68.69	93.56	98.62	N.A.
General Government Final Consumption Expenditure	4.82	8.70	14.06	16.34	20.26	28.42	30.64	N.A.
Gross Fixed Capital Formation	4.89	12.64	14.92	20.60	23.60	37.74	38.10	N.A.
Stock Change	-0.03	-0.15	-0.15	1.18	1.42	0.83	-0.32	N.A.
Exports of Goods and Services	6.90	13.78	19.76	27.13	41.16	43.79	48.20	N.A.
Imports of Goods and Services	7.19	15.14	19.57	26.37	39.22	47.44	50.53	N.A.
Real GDP & its Components (Billions of 2000 NZD) *1								
Gross Domestic Product	72.40	84.72	87.21	101.62	115.91	139.70	141.89	146.15
Household Final Consumption Expenditure, etc.	44.04	48.07	52.73	59.60	68.69	86.90	89.18	N.A.
General Government Final Consumption Expenditure	14.17	15.44	16.59	17.92	20.26	24.37	25.44	N.A.
Gross Fixed Capital Formation	10.64	16.51	16.02	20.68	23.60	34.70	33.90	N.A.
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	16.19	19.84	23.95	32.22	41.16	48.24	49.74	N.A.
Imports of Goods and Services	14.31	18.10	23.44	31.85	39.22	57.69	56.70	N.A.
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	7.4	7.5	8.8	8.5	8.3	7.8	7.7	N.A.
Industry	27.8	29.0	25.7	25.2	23.5	22.7	22.0	N.A.
Services, etc.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Manufacturing Production Index (2005=100) *2	56.4	67.4	60.2	84.9	89.6	100.0	98.5	100.5
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	5.421	5.720	9.394	13.645	13.272	21.730	22.409	26.931
Imports, c.i.f.	5.473	5.992	9.501	13.957	13.906	26.219	26.424	30.890
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.303	-0.061	0.815	0.817	0.609	-2.577	-1.997	-1.761
Current Account	-0.973	-2.657	-1.453	-3.065	-2.679	-9.281	-9.265	-10.635
Overall Balance	-0.396	-0.385	1.013	0.390	-0.143	2.441	4.255	3.087
Foreign Exchange Rate (NZD/USD) *1	1.0267	2.0234	1.6762	1.5239	2.2011	1.4203	1.5421	1.3607
Purchasing Power Parity (NZD/International Dollar) *1	0.8645	1.1376	1.5243	1.4618	1.4457	1.5350	1.5232	1.5466
Price Indices								
GDP Deflator (2000=100) *3	32.4	55.1	84.4	91.9	100.0	112.3	116.6	122.3
Industry Input Price Index (2005=100) *2	31.6	55.3	74.5	80.2	88.6	100.0	105.7	108.2
Consumer Price Index (2005=100) *2	27.0	47.5	74.3	82.4	88.5	100.0	103.4	105.8
Growth Rate (%) *3								
Real GDP	0.90	0.77	-0.04	4.17	2.41	2.69	1.57	3.00
Population	0.13	0.57	1.47	1.47	0.59	1.14	1.23	1.04
Price								
Industry Input Price Index	22.9	15.3	4.7	0.8	7.6	5.4	5.7	2.4
Consumer Price Index	17.1	15.4	6.1	3.8	2.6	3.0	3.4	2.4

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : NZD means New Zealand Dollar, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



### 3.13 Papua New Guinea

Energy Balance Table of Papua New Guinea in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	-	-	1,987	-	-	-	-	-	-
2 Import	-	-	778	753	16	-	-	37	387
3 Export	-	-	-1,487	-172	-	-130	-	-	-1
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-	-	-454	30	-1	10	-	-	13
<b>6 Total Primary Energy Supply</b>	-	-	824	611	16	-120	-	37	400
7 Transfers	-	-	-12	13	47	-39	-	-	3
8 Total Transformation Sector	-	-	-800	187	27	173	82	-	135
8.1 Main Activity Producer	-	-	-	-104	-	-	-	-	-51
8.2 Autoproducers	-	-	-	-469	-	-	-	-	-206
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-800	760	27	173	82	-	392
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-	-17	-	-	-	-	-5
10. Discrepancy	-	-	-0	0	-0	1	-	0	-0
<b>11 Total Final Energy Consumption</b>	-	-	12	794	90	16	82	37	532
12 Industry Sector	-	-	12	399	-	16	-	-	357
13 Transport Sector	-	-	-	353	90	-	82	-	175
14 Other Sector	-	-	-	42	-	-	-	37	-
14.1 Residential & Commercial	-	-	-	-	-	-	-	-	-
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	-	-	-	42	-	-	-	37	-
15 Non-energy	-	-	-	-	-	-	-	-	-

Energy Balance Table of Papua New Guinea in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	-	-	2,867	-	-	-	-	-	-
2 Import	-	-	993	655	52	-	-	19	310
3 Export	-	-	-2,482	-435	-29	-170	-31	-	-102
4 International Marine Bunkers	-	-	-	-	-	-	-	-	-
5 Stock Changes	-	-	-294	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	-	-	1,084	220	23	-170	-31	19	207
7 Transfers	-	-	-13	13	-	9	-18	17	3
8 Total Transformation Sector	-	-	-1,060	562	66	179	129	-	314
8.1 Main Activity Producer	-	-	-	-92	-	-	-	-	-46
8.2 Autoproducers	-	-	-	-406	-	-	-	-	-195
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-1,060	1,060	66	179	129	-	555
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-	-21	-	-	-	-	-7
10. Discrepancy	-	-	0	0	0	0	-0	0	-0
<b>11 Total Final Energy Consumption</b>	-	-	12	775	89	18	80	36	516
12 Industry Sector	-	-	-	381	-	9	-	-	347
13 Transport Sector	-	-	-	344	89	-	80	-	170
14 Other Sector	-	-	12	50	-	9	-	36	-
14.1 Residential & Commercial	-	-	-	-	-	-	-	-	-
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	-	-	12	50	-	9	-	36	-
15 Non-energy	-	-	-	-	-	-	-	-	-



Energy Balance Table of Papua New Guinea in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	326	74	-	-	-	-	-	2,387
299	14	-	-	-	-	-	-	-	-	-	-	1,532
-40	-2	-	-	-	-	-	-	-	-	-	-	-1,659
-	-	-	-	-	-	-	-	-	-	-	-	-
6	1	-	-	-	-	-	-	-	-	-	-	-425
264	14	-	-	-	326	74	-	-	-	-	-	1,835
1	-	-	-	-	-	-	-	-	-	-	-	1
-246	4	11	-	-	-108	-74	-	-	-	268	-	-528
-53	-	-	-	-	-	-44	-	-	-	72	-	-77
-263	-	-	-	-	-108	-30	-	-	-	196	-	-411
-	-	-	-	-	-	-	-	-	-	-	-	-
70	4	11	-	-	-	-	-	-	-	-	-	-41
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-1	-11	-	-	-217	-	-	-	-	-18	-	-253
0	0	-	-	-	-	-	-	-	-	-0	-	-0
20	18	-	-	-	-	-	-	-	-	249	-	1,055
14	12	-	-	-	-	-	-	-	-	177	-	588
6	-	-	-	-	-	-	-	-	-	-	-	353
-	5	-	-	-	-	-	-	-	-	72	-	114
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	5	-	-	-	-	-	-	-	-	72	-	114
-	-	-	-	-	-	-	-	-	-	-	-	-

Energy Balance Table of Papua New Guinea in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	259	74	-	-	-	-	-	3,201
268	6	-	-	-	-	-	-	-	-	-	-	1,648
-102	-	-	-	-	-	-	-	-	-	-	-	-2,917
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-294
166	6	-	-	-	259	74	-	-	-	-	-	1,638
1	-	-	-	-	-	-	-	-	-	-	-	-0
-149	14	10	-	-	-111	-74	-	-	-	259	-	-423
-46	-	-	-	-	-	-44	-	-	-	68	-	-68
-210	-	-	-	-	-111	-30	-	-	-	191	-	-356
-	-	-	-	-	-	-	-	-	-	-	-	-
108	14	10	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-3	-10	-	-	-148	-	-	-	-	-18	-	-187
0	-0	-	-	-	0	-	-	-	-	-0	-	0
19	17	-	-	-	-	-	-	-	-	241	-	1,028
13	12	-	-	-	-	-	-	-	-	172	-	553
6	-	-	-	-	-	-	-	-	-	-	-	344
-	5	-	-	-	-	-	-	-	-	69	-	131
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	5	-	-	-	-	-	-	-	-	69	-	131
-	-	-	-	-	-	-	-	-	-	-	-	-

## Major Energy Indicators of Papua New Guinea

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	631	737	865	921	1,123	1,611	1,638	1,835
Indigenous Production	27	36	4,612	4,897	3,866	2,780	3,201	2,387
Import	625	749	796	731	908	1,597	1,648	1,532
Export	-	-29	-4,512	-4,694	-3,651	-2,767	-2,917	-1,659
Final Energy Consumption	441	512	613	689	880	1,013	1,028	1,055
Industry	161	214	190	271	480	542	553	588
Transport	211	228	209	251	306	342	344	353
Residential & Commercial	29	22	35	79	82	-	-	-
Agriculture	29	33	81	77	-	-	-	-
Non-energy	-	-	1	12	12	-	-	-
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	1	1	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	1	1	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	1	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	1	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	-	-	-	10	-	1,036	1,084	824
Indigenous Production	-	-	4,500	4,717	3,651	2,462	2,867	1,987
Import	-	-	-	-	-	917	993	778
Export	-	-	-4,500	-4,694	-3,651	-2,344	-2,482	-1,487
Transformation Sector	-	-	-	-24	-	-993	-1,060	-800
Petroleum Refineries	-	-	-	-24	-	-993	-1,060	-800
<b>Petroleum Products</b>								
Primary Energy Supply	604	700	752	731	908	257	220	611
Import	625	748	795	731	908	680	655	753
Export	-	-29	-12	-	-	-423	-435	-172
Transformation Sector	-264	-312	-346	-82	-222	527	562	187
Power Generation	-264	-312	-346	-104	-222	-474	-498	-573
Petroleum Refineries	-	-	-	22	-	1,000	1,060	760
Final Energy Consumption	338	382	398	571	686	760	775	794
Industry	80	111	87	197	338	370	381	399
Transport	211	228	209	251	306	342	344	353
Residential & Commercial	19	10	24	35	30	-	-	-
Agriculture	27	30	76	77	-	-	-	-
Non-energy	-	-	-	12	12	-	-	-
<b>Natural Gas</b>								
Primary Energy Supply	-	-	72	83	119	241	259	326
Indigenous Production	-	-	72	83	119	241	259	326
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-83	-119	-120	-111	-108
Power Generation	-	-	-	-83	-119	-120	-111	-108
Final Energy Consumption	-	-	72	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	108	133	154	136	204	258	259	268
Thermal	81	97	114	61	124	182	185	193
Hydro	27	36	40	75	80	77	74	74
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	103	130	142	117	194	240	241	249
Industry	81	103	103	74	142	172	172	177
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	10	12	11	43	52	-	-	-
Agriculture	2	3	5	-	-	-	-	-

## Major Economic Indicators of Papua New Guinea

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	3.20	3.64	4.13	4.71	5.38	6.07	6.20	6.32
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	2.07	2.21	2.34	3.54	3.50	3.79	3.88	4.12
Real Term (Billions of 2000 Price and 2000 PPP)	5.52	5.91	6.26	9.45	9.35	10.11	10.37	11.01
Nominal (Billions of Current USD)	2.55	2.40	3.22	4.84	3.50	4.92	5.58	6.26
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	646	608	567	751	650	624	626	652
Real Term (2000 Price and 2000 PPP)	1,726	1,625	1,514	2,006	1,737	1,666	1,672	1,741
Nominal (Current USD)	796	660	780	1,028	650	811	899	989
Nominal GDP & its Components (Billions of Current PGK) *1								
Gross Domestic Product	1.71	2.40	3.08	6.19	9.74	15.27	17.05	18.55
Household Final Consumption Expenditure, etc.	1.05	1.62	1.82	2.70	4.34	8.46	8.01	8.78
General Government Final Consumption Expenditure	0.41	0.57	0.76	1.06	1.61	2.01	2.07	2.13
Gross Fixed Capital Formation	0.39	0.45	0.77	1.21	1.99	2.76	3.08	3.35
Stock Change	0.04	0.03	-0.02	0.15	0.14	0.26	0.30	0.30
Exports of Goods and Services	0.74	1.02	1.25	3.78	6.44	11.19	14.06	16.60
Imports of Goods and Services	0.91	1.27	1.51	2.71	4.79	9.42	10.46	12.62
Real GDP & its Components (Billions of 1983 PGK) *1								
Gross Domestic Product	4.58	4.90	5.19	7.83	7.75	8.38	8.60	9.13
Household Final Consumption Expenditure, etc.	3.28	3.55	3.06	3.59	3.30	4.16	5.24	6.35
General Government Final Consumption Expenditure	1.17	1.06	1.10	1.14	1.45	1.51	1.49	1.46
Gross Fixed Capital Formation	1.28	0.98	1.33	1.46	1.78	1.78	1.83	1.95
Stock Change	0.09	0.05	-0.04	0.20	0.13	0.18	0.18	0.18
Exports of Goods and Services	2.01	2.46	2.54	5.08	5.23	6.38	5.61	4.86
Imports of Goods and Services	3.70	3.50	2.90	3.32	4.14	5.62	5.74	5.66
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	35.9	36.0	39.1	34.5	39.4	37.2	36.5	35.7
Industry	25.4	24.7	22.5	31.2	31.4	32.5	32.7	33.2
Services, etc.	39.6	40.2	40.1	34.0	23.8	24.8	25.3	25.9
Industrial Production Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	1.031	0.912	1.177	2.654	2.096	3.273	4.166	4.681
Imports, c.i.f.	1.176	1.008	1.193	1.452	1.151	1.729	2.260	2.990
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-0.035	0.051	0.069	1.408	1.095	1.753	N.A.	N.A.
Current Account	-0.289	-0.122	-0.076	0.492	0.345	0.423	N.A.	N.A.
Overall Balance	-0.084	-0.001	0.022	-0.039	0.104	-0.282	N.A.	N.A.
Foreign Exchange Rate (PGK/USD) *1	0.6709	1.0003	0.9550	1.2798	2.7822	3.1019	3.0567	2.9653
Purchasing Power Parity (PGK/International Dollar) *1	0.5731	0.5836	0.6026	0.7120	1.0416	1.3359	1.4105	1.4075
Price Indices								
GDP Deflator (1983=100) *3	37.3	49.0	59.3	79.1	125.6	182.1	198.3	203.2
Wholesale Price Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index (2000=100) *2	15.8	21.6	27.7	39.2	68.6	100.0	102.4	103.3
Growth Rate (%) *3								
Real GDP	-2.30	4.00	-3.01	-3.31	-2.49	3.36	2.56	6.21
Population	2.35	2.63	2.60	2.70	2.64	2.27	2.17	1.97
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index	12.1	3.7	7.0	17.3	15.6	1.8	2.4	0.9

Source \*1 : "World Development Indicators", World Bank  
\*2 : "International Financial Statistics", International Monetary Fund  
\*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note : N.A. means "not available"  
: PGK means Kina, USD means United States Dollar  
: PPP means Purchasing Power Parity



## 3.14 Peru

## Energy Balance Table of Peru in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	78	-	5,386	-	-	-	-	-	-
<b>2 Import</b>	672	197	5,805	1,299	91	-	1	-	996
<b>3 Export</b>	-	-	-1,442	-2,783	-1,116	-	-421	-	-152
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	74	-3	-55	-1,595	-514	-	-42	-	-537
<b>6 Total Primary Energy Supply</b>	825	193	9,694	-3,079	-1,539	-	-462	-	307
<b>7 Transfers</b>	-	-	-1,326	1,589	765	-	-	-	139
<b>8 Total Transformation Sector</b>	-242	-146	-9,098	8,218	1,726	-	652	63	2,803
8.1 Main Activity Producer	-242	-	-	-234	-	-	-	-	-45
8.2 Autoproducers	-	-	-	-133	-	-	-	-	-124
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-9,098	8,584	1,726	-	652	63	2,972
8.5 Coal Transformation	-	-146	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-382	-13	-	-	-	-106
<b>10. Discrepancy</b>	0	-17	730	215	-0	-	-0	-0	-3
<b>11 Total Final Energy Consumption</b>	583	30	-	6,560	939	-	189	63	3,140
<b>12 Industry Sector</b>	583	30	-	1,665	25	-	-	6	543
<b>13 Transport Sector</b>	-	-	-	3,734	800	-	189	-	2,558
<b>14 Other Sector</b>	0	-	-	1,047	114	-	-	57	38
14.1 Residential & Commercial	0	-	-	790	114	-	-	57	14
14.2 Agriculture	-	-	-	13	-	-	-	-	5
14.3 Other	-	-	-	244	-	-	-	1	19
<b>15 Non-energy</b>	-	-	-	114	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

## Energy Balance Table of Peru in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	75	-	5,456	-	-	-	-	-	-
<b>2 Import</b>	507	205	5,330	1,000	91	-	1	-	796
<b>3 Export</b>	-	-	-1,256	-2,306	-919	-	-371	-	-103
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	13	-16	-188	-1,058	-578	-	312	-	-215
<b>6 Total Primary Energy Supply</b>	594	189	9,342	-2,363	-1,406	-	-58	-	478
<b>7 Transfers</b>	-	-	-1,371	1,618	796	-	-	-	147
<b>8 Total Transformation Sector</b>	-233	-149	-8,701	7,805	1,567	-	537	136	2,537
8.1 Main Activity Producer	-233	-	-	-330	-	-	-	-	-54
8.2 Autoproducers	-	-	-	-142	-	-	-	-	-138
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-8,701	8,277	1,567	-	537	136	2,728
8.5 Coal Transformation	-	-149	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-368	-13	-	-	-	-106
<b>10. Discrepancy</b>	6	-10	730	32	-0	-	43	-43	-4
<b>11 Total Final Energy Consumption</b>	367	30	-	6,724	945	-	522	93	3,051
<b>12 Industry Sector</b>	367	30	-	1,787	25	-	-	4	546
<b>13 Transport Sector</b>	-	-	-	3,939	805	-	522	-	2,487
<b>14 Other Sector</b>	0	-	-	783	115	-	-	89	18
14.1 Residential & Commercial	0	-	-	783	115	-	-	89	18
14.2 Agriculture	-	-	-	0	-	-	-	-	-
14.3 Other	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	215	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

Energy Balance Table of Peru in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	2,597	2,101	-	7	355	-	-	10,525
-	97	-	-	114	-	-	-	-	0	-	-	7,973
-1,075	-3	-	-	-15	-	-	-	-	-	-	-	-4,225
-	-	-	-	-	-	-	-	-	-	-	-	-
-264	-58	-	-	-180	-	-	-	-	-	-	-	-1,579
-1,339	36	-	-	-81	2,597	2,101	-	7	356	-	-	12,694
-	658	-	-	27	-	-	-	-	-	-	-	263
2,474	225	105	-	171	-1,624	-1,685	-	-7	-218	2,582	-	-2,220
-189	-	-	-	-	-1,564	-1,682	-	-	-	2,425	-	-1,296
-9	-	-	-	-	-60	-3	-	-7	-137	157	-	-183
-	-	-	-	-	-	-	-	-	-	-	-	-
2,672	225	105	-	171	-	-	-	-	-	-	-	-513
-	-	-	-	-	-	-	-	-	-	-	-	-146
-	-	-	-	-	-	-	-	-	-81	-	-	-81
-87	-	-173	-	-3	-437	-	-	-	-	-261	-	-1,080
150	-0	69	-	-	-0	-416	-	-	-138	-0	-	373
1,199	918	-	-	114	535	-	-	-	-	2,321	-	10,030
947	144	-	-	-	454	-	-	-	-	1,269	-	4,000
18	169	-	-	-	46	-	-	-	-	-	-	3,780
233	605	-	-	-	36	-	-	-	-	1,052	-	2,135
2	604	-	-	-	14	-	-	-	-	1,001	-	1,805
8	0	-	-	-	-	-	-	-	3	34	-	50
224	0	-	-	-	22	-	-	-	-	17	-	283
-	-	-	-	114	-	-	-	-	-	-	-	114

Energy Balance Table of Peru in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	1,859	1,685	-	2	191	-	-	9,268
5	9	-	-	100	-	-	-	-	-	-	-	7,042
-872	-29	-	-	-13	-	-	-	-	-	-	-	-3,562
-	-	-	-	-	-	-	-	-	-	-	-	-
-448	-39	-	-	-89	-	-	-	-	-	-	-	-1,249
-1,315	-59	-	-	-3	1,859	1,685	-	2	191	-	-	11,499
-	661	-	-	14	-	-	-	-	-	-	-	247
2,484	218	121	-	206	-1,148	-1,685	-	-0	-182	2,354	-	-1,939
-276	-	-	-	-	-1,043	-1,682	-	-	-	2,203	-	-1,085
-4	-	-	-	-	-	-3	-	-0	-105	151	-	-99
-	-	-	-	-	-	-	-	-	-	-	-	-
2,763	218	121	-	206	-	-	-	-	-	-	-	-424
-	-	-	-	-	-	-	-	-	-	-	-	-149
-	-	-	-	-	-105	-	-	-0	-77	-	-	-182
-87	-	-159	-	-3	-377	-	-	-	-	-316	-	-1,061
-2	-0	38	-	0	0	-	-	-0	-9	-0	-	748
1,079	819	-	-	215	334	-	-	1	-	2,038	-	9,494
1,057	156	-	-	-	321	-	-	0	-	1,110	-	3,615
21	104	-	-	-	7	-	-	-	-	-	-	3,946
2	559	-	-	-	6	-	-	1	-	928	-	1,719
2	559	-	-	-	6	-	-	1	-	877	-	1,667
-	0	-	-	-	-	-	-	-	-	-	-	0
-	-	-	-	-	-	-	-	-	-	51	-	51
-	-	-	-	215	-	-	-	-	-	-	-	215

## Major Energy Indicators of Peru

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	8,185	7,564	7,537	9,450	11,047	11,127	11,499	12,694
Indigenous Production	11,095	11,426	8,193	8,124	7,832	8,064	9,268	10,525
Import	195	109	1,668	4,346	5,397	6,515	7,042	7,973
Export	-3,191	-3,949	-2,267	-2,561	-2,094	-3,677	-3,562	-4,225
Final Energy Consumption	6,214	5,842	6,208	7,692	9,200	8,971	9,494	10,030
Industry	2,224	2,070	1,958	2,562	3,336	3,454	3,615	4,000
Transport	2,260	2,121	2,499	3,055	3,386	3,491	3,946	3,780
Residential & Commercial	1,216	1,239	1,274	1,330	1,566	1,649	1,667	1,805
Agriculture	184	95	107	132	107	34	0	50
Non-energy	120	120	80	217	122	-	215	114
<b>Coal, Coal Products</b>								
Primary Energy Supply	142	115	145	375	630	928	784	1,018
Indigenous Production	29	89	68	35	12	30	75	78
Import	124	81	71	338	588	807	712	869
Export	-	-13	-	-	-	-	-	-
Transformation Sector	32	19	6	-57	-180	-330	-382	-388
Power Generation	-	-	-	-	-99	-230	-233	-242
Final Energy Consumption	53	112	100	290	430	591	397	613
Industry	53	105	93	282	430	591	397	613
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	7	7	8	-	0	0	0
Agriculture	-	-	-	-	0	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	7,532	8,400	7,149	6,974	7,268	8,258	9,342	9,694
Indigenous Production	9,869	9,656	6,493	6,151	4,829	4,074	5,456	5,386
Import	-	-	888	2,419	3,090	4,698	5,330	5,805
Export	-2,383	-1,290	-150	-1,419	-687	-609	-1,256	-1,442
Transformation Sector	-7,379	-8,841	-7,432	-7,473	-7,740	-7,782	-8,701	-9,098
Petroleum Refineries	-7,379	-8,841	-7,432	-7,473	-7,740	-7,782	-8,701	-9,098
<b>Petroleum Products</b>								
Primary Energy Supply	-686	-2,632	-1,389	162	158	-2,019	-2,363	-3,079
Import	71	28	709	1,589	1,720	1,010	1,000	1,299
Export	-808	-2,646	-2,117	-1,142	-1,407	-3,068	-2,306	-2,783
Transformation Sector	6,411	7,904	6,689	6,463	7,077	7,365	7,805	8,218
Power Generation	-857	-685	-760	-926	-686	-608	-471	-367
Petroleum Refineries	7,268	8,589	7,449	7,389	7,763	7,973	8,277	8,584
Final Energy Consumption	5,332	4,705	5,020	6,292	7,225	6,299	6,724	6,560
Industry	1,669	1,359	1,210	1,631	2,021	1,609	1,787	1,665
Transport	2,260	2,121	2,499	3,055	3,386	3,491	3,939	3,734
Residential & Commercial	918	850	854	894	1,027	868	783	790
Agriculture	155	58	87	100	65	34	0	13
Non-energy	120	120	80	217	122	-	215	114
<b>Natural Gas</b>								
Primary Energy Supply	594	874	757	827	1,547	2,221	1,859	2,597
Indigenous Production	594	874	757	827	1,547	2,221	1,859	2,597
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-150	-157	-135	-97	-411	-1,558	-1,148	-1,624
Power Generation	-55	-78	-75	-58	-226	-1,263	-1,043	-1,624
Final Energy Consumption	80	108	74	3	1	179	334	535
Industry	41	47	28	-	-	179	321	454
Transport	-	-	-	-	-	0	7	46
Residential & Commercial	39	61	46	3	1	0	6	14
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	863	1,042	1,132	1,449	1,713	2,194	2,354	2,582
Thermal	260	235	257	337	322	648	669	897
Hydro	603	807	875	1,112	1,391	1,546	1,685	1,685
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	749	917	1,014	1,106	1,490	1,900	2,038	2,321
Industry	461	559	627	649	884	1,075	1,110	1,269
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	259	321	367	424	538	780	877	1,001
Agriculture	29	37	20	32	42	-	-	34

Note: Total excludes non-commercial biomass supply and consumption.



## Major Economic Indicators of Peru

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	17.33	19.53	21.78	23.94	26.00	27.84	28.18	28.51
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	39.13	39.76	36.12	47.17	53.34	65.49	70.56	76.81
Real Term (Billions of 2000 Price and 2000 PPP)	93.05	94.56	85.90	112.18	126.84	155.74	167.80	182.66
Nominal (Billions of Current USD)	20.66	17.16	28.97	53.67	53.34	79.39	92.32	107.33
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	2,258	2,036	1,659	1,970	2,051	2,353	2,504	2,694
Real Term (2000 Price and 2000 PPP)	5,370	4,843	3,945	4,685	4,878	5,595	5,955	6,407
Nominal (Current USD)	1,192	879	1,330	2,241	2,051	2,852	3,277	3,765
Nominal GDP & its Components (Billions of Current PEN) *1								
Gross Domestic Product	0.00	0.00	5.44	120.93	186.14	261.65	302.26	335.73
Household Final Consumption Expenditure, etc.	0.00	0.00	4.01	86.00	132.46	173.05	186.64	206.35
General Government Final Consumption Expenditure	0.00	0.00	0.43	11.79	19.72	26.30	28.81	30.71
Gross Fixed Capital Formation	0.00	0.00	0.88	29.10	37.61	47.97	58.39	72.62
Stock Change	0.00	0.00	0.02	0.92	-0.08	-1.16	2.19	4.34
Exports of Goods and Services	0.00	0.00	0.86	15.23	29.79	65.65	86.23	96.92
Imports of Goods and Services	0.00	0.00	0.75	22.07	33.80	50.15	60.01	75.21
Real GDP & its Components (Billions of 1994 PEN) *1								
Gross Domestic Product	88.80	90.24	81.98	107.06	121.06	148.64	160.15	174.33
Household Final Consumption Expenditure, etc.	64.02	68.79	60.90	78.22	86.20	102.86	109.48	118.62
General Government Final Consumption Expenditure	7.19	8.45	7.38	9.41	11.56	13.53	14.56	15.22
Gross Fixed Capital Formation	16.36	10.77	13.72	25.47	23.74	27.70	32.91	40.59
Stock Change	3.49	0.30	0.21	0.91	-0.05	-0.67	1.27	2.50
Exports of Goods and Services	9.03	10.09	9.26	13.29	20.08	32.51	32.77	34.82
Imports of Goods and Services	11.28	8.17	9.50	20.23	20.48	27.28	30.85	37.42
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	6.3	7.4	8.5	8.2	9.4	8.8	8.8	8.4
Industry	26.4	24.0	25.9	27.8	27.5	29.0	28.8	29.1
Services, etc.	57.6	58.9	56.4	53.8	53.5	52.4	52.6	53.0
Manufacturing Production Index (2000=100) *2	70.6	63.0	55.2	72.6	78.7	100.0	107.5	119.1
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	3.898	2.979	3.230	5.575	7.028	17.368	23.830	27.882
Imports, c.i.f.	2.573	1.767	2.634	7.584	7.415	12.502	15.312	20.494
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.826	1.219	0.399	-2.241	-0.403	5.286	8.934	8.356
Current Account	-0.101	0.102	-1.419	-4.625	-1.546	1.148	2.755	1.505
Overall Balance	0.279	-1.594	-2.141	-0.590	-0.130	1.411	3.221	10.344
Foreign Exchange Rate (PEN/USD) *1	0.0000	0.0000	0.1879	2.2533	3.4900	3.2958	3.2740	3.1280
Purchasing Power Parity (PEN/International Dollar) *1	0.0000	0.0000	0.0776	1.1705	1.4675	1.4865	1.5451	1.5358
Price Indices								
GDP Deflator (1994=100) *3	0.0	0.0	6.6	112.9	153.8	176.0	188.7	192.6
Wholesale Price Index (2000=100) *2	0.0	0.0	5.4	66.0	91.1	100.0	103.2	105.8
Consumer Price Index (2000=100) *2	0.0	0.0	3.6	65.2	90.9	100.0	102.0	103.8
Growth Rate (%) *3								
Real GDP	3.08	2.80	-5.14	8.61	2.95	6.83	7.74	8.86
Population	2.60	2.33	2.10	1.81	1.55	1.27	1.22	1.18
Price								
Wholesale Price Index	N.A.	173.9	6,737.4	10.5	4.3	2.3	3.2	2.5
Consumer Price Index	59.1	163.4	7,481.7	11.1	3.8	1.6	2.0	1.8

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : PEN means Nuevo Sol, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.15 Philippines

Energy Balance Table of Philippines in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	1,791	-	827	-	-	-	-	-	-
2 Import	4,079	-	10,331	5,588	1,426	-	373	51	2,147
3 Export	422	-	-801	-2,563	-94	-80	-33	-	-69
4 International Marine Bunkers	-	-	-	-234	-	-	-	-	-46
5 Stock Changes	-	-	326	-49	-114	36	-	7	-129
6 Total Primary Energy Supply	6,292	-	10,683	2,742	1,218	-44	340	58	1,903
7 Transfers	-	-	-	-	-	-	-	-	-
8 Total Transformation Sector	-3,972	-	-10,045	8,445	1,559	67	722	161	3,367
8.1 Main Activity Producer	-3,972	-	-	-1,045	-	-	-	-	-145
8.2 Autoproducers	-	-	-	-	-	-	-	-	-
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-10,045	9,490	1,559	67	722	161	3,512
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-411	-	-	-	-	-	-
10. Discrepancy	-901	-	-227	922	97	-23	5	-22	17
11 Total Final Energy Consumption	1,419	-	-	12,109	2,873	-	1,068	197	5,286
12 Industry Sector	1,238	-	-	2,136	-	-	-	16	727
13 Transport Sector	-	-	-	8,190	2,869	-	1,068	-	4,048
14 Other Sector	-	-	-	1,689	4	-	-	181	512
14.1 Residential & Commercial	-	-	-	1,320	-	-	-	179	175
14.2 Agriculture	-	-	-	199	2	-	-	1	179
14.3 Other	-	-	-	170	2	-	-	1	157
15 Non-energy	181	-	-	94	-	-	-	-	-

Energy Balance Table of Philippines in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
1 Indigenous Production	1,243	-	702	-	-	-	-	-	-
2 Import	4,073	-	10,354	4,957	1,080	-	276	77	2,132
3 Export	-	-	-678	-1,687	-42	-180	-	-	-303
4 International Marine Bunkers	-	-	-	-124	-	-	-	-	-42
5 Stock Changes	-	-	-80	-24	66	-36	-	-19	6
6 Total Primary Energy Supply	5,316	-	10,298	3,122	1,104	-217	276	58	1,793
7 Transfers	-	-	-	-	-	-	-	-	-
8 Total Transformation Sector	-3,714	-	-9,897	8,409	1,532	135	708	165	3,399
8.1 Main Activity Producer	-3,714	-	-	-1,032	-	-	-	-	-145
8.2 Autoproducers	-	-	-	-	-	-	-	-	-
8.3 Gas Processing	-	-	-	-	-	-	-	-	-
8.4 Petroleum Refineries	-	-	-9,897	9,441	1,532	135	708	165	3,544
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
9. Loss & Own Use	-	-	-324	-	-	-	-	-	-
10. Discrepancy	-278	-	-77	-190	-74	82	-31	-5	-230
11 Total Final Energy Consumption	1,324	-	-	11,341	2,561	-	953	218	4,962
12 Industry Sector	1,175	-	-	1,547	-	-	-	18	474
13 Transport Sector	-	-	-	8,030	2,559	-	953	-	4,111
14 Other Sector	-	-	-	1,693	2	-	-	200	378
14.1 Residential & Commercial	-	-	-	1,457	-	-	-	195	165
14.2 Agriculture	-	-	-	20	0	-	-	5	10
14.3 Other	-	-	-	216	2	-	-	0	202
15 Non-energy	149	-	-	71	-	-	-	-	-

Energy Balance Table of Philippines in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,033	736	-	8,790	6,985	-	-	22,162
683	796	-	-	112	-	-	-	-	2	-	-	20,000
-1,399	-	-	-	-888	-	-	-	-	-	-	-	-2,943
-188	-	-	-	-	-	-	-	-	-	-	-	-234
156	-3	-	-	-3	-	-	-	-	-	-	-	277
-747	793	-	-	-779	3,033	736	-	8,790	6,987	-	-	39,263
-	-	-	-	-	-	-	-	-	-	-	-	-
2,147	264	-	-	158	-2,720	-736	-	-8,790	-1,293	5,127	-	-13,984
-900	-	-	-	-	-2,720	-736	-	-8,790	-	5,127	-	-12,137
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
3,047	264	-	-	158	-	-	-	-	-	-	-	-554
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-1,293	-	-	-1,293
-	-	-	-	-	-282	-	-	-	-	-998	-	-1,690
148	-16	-	-	715	46	-	-	-	0	-	-	-159
1,548	1,042	-	-	94	77	-	-	-	5,694	4,129	-	23,429
1,212	180	-	-	-	77	-	-	-	1,250	1,397	-	6,098
161	44	-	-	-	-	-	-	-	-	9	-	8,199
174	818	-	-	-	-	-	-	-	4,444	2,723	-	8,856
148	818	-	-	-	-	-	-	-	4,444	2,681	-	8,445
17	-	-	-	-	-	-	-	-	-	42	-	242
9	-	-	-	-	-	-	-	-	-	-	-	170
-	-	-	-	94	-	-	-	-	-	-	-	276

Energy Balance Table of Philippines in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	2,530	855	-	9,005	7,044	-	-	21,378
670	646	-	-	76	-	-	-	-	1	-	-	19,385
-1,162	-	-	-	-	-	-	-	-	-	-	-	-2,365
-82	-	-	-	-	-	-	-	-	-	-	-	-124
-38	13	-	-	-15	-	-	-	-	-	-	-	-103
-612	659	-	-	61	2,530	855	-	9,005	7,045	-	-	38,171
-	-	-	-	-	-	-	-	-	-	-	-	-
2,125	346	-	-	-	-2,311	-855	-	-9,005	-1,252	4,883	-	-13,741
-887	-	-	-	-	-2,311	-855	-	-9,005	-	4,883	-	-12,033
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
3,012	346	-	-	-	-	-	-	-	-	-	-	-456
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-1,252	-	-	-1,252
-	-	-	-	-	-193	-	-	-	-	-956	-	-1,473
85	-26	-	-	10	27	-	-	-	-0	-0	-	-519
1,597	979	-	-	71	53	-	-	-	5,793	3,928	-	22,438
985	71	-	-	-	53	-	-	-	1,206	1,344	-	5,324
403	4	-	-	-	-	-	-	-	-	8	-	8,039
209	904	-	-	-	-	-	-	-	4,587	2,576	-	8,856
192	904	-	-	-	-	-	-	-	4,587	2,535	-	8,579
5	-	-	-	-	-	-	-	-	-	41	-	61
12	-	-	-	-	-	-	-	-	-	-	-	216
-	-	-	-	71	-	-	-	-	-	-	-	220

## Major Energy Indicators of Philippines

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	12,441	12,650	28,654	33,301	39,455	38,530	38,171	39,263
Indigenous Production	2,703	5,638	17,222	15,820	19,552	21,381	21,378	22,162
Import	10,525	7,360	12,555	18,709	21,760	18,943	19,385	20,000
Export	-133	-165	-641	-960	-1,753	-1,954	-2,365	-2,943
Final Energy Consumption	9,041	7,049	19,820	23,104	23,988	23,096	22,438	23,429
Industry	4,666	3,395	4,511	5,255	5,212	5,228	5,324	6,098
Transport	2,289	2,019	4,636	7,295	8,181	8,592	8,039	8,199
Residential & Commercial	1,129	1,093	10,005	9,831	9,898	8,782	8,579	8,445
Agriculture	-	-	90	62	45	59	61	242
Non-energy	792	444	384	404	399	186	220	276
<b>Coal, Coal Products</b>								
Primary Energy Supply	269	1,159	1,358	1,584	4,539	5,230	5,316	6,292
Indigenous Production	151	580	649	681	715	1,520	1,243	1,791
Import	118	579	709	903	3,824	3,710	4,073	4,079
Export	-	-	-	-	-	-	-	422
Transformation Sector	-47	-801	-559	-750	-3,784	-4,134	-3,714	-3,972
Power Generation	-47	-801	-559	-750	-3,784	-4,134	-3,714	-3,972
Final Energy Consumption	82	309	696	894	840	1,184	1,324	1,419
Industry	82	309	526	733	701	1,056	1,175	1,238
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	171	161	139	127	149	181
<b>Crude Oil</b>								
Primary Energy Supply	9,146	6,203	10,825	15,673	15,121	10,493	10,298	10,683
Indigenous Production	462	341	229	126	55	765	702	827
Import	8,684	6,236	10,597	15,755	15,033	10,301	10,354	10,331
Export	-	-	-	-91	-	-738	-678	-801
Transformation Sector	-8,809	-6,201	-10,242	-15,126	-14,721	-9,958	-9,897	-10,045
Petroleum Refineries	-8,809	-6,201	-10,242	-15,126	-14,721	-9,958	-9,897	-10,045
<b>Petroleum Products</b>								
Primary Energy Supply	937	572	125	1,031	1,013	3,709	3,122	2,742
Import	1,723	545	1,249	2,051	2,903	4,931	4,957	5,588
Export	-133	-165	-641	-869	-1,753	-1,216	-1,687	-2,563
Transformation Sector	5,522	4,208	7,939	11,081	12,333	8,126	8,409	8,445
Power Generation	-2,547	-1,586	-2,135	-3,825	-1,925	-1,411	-1,032	-1,045
Petroleum Refineries	8,069	5,794	10,074	14,906	14,258	9,537	9,441	9,490
Final Energy Consumption	7,671	5,302	8,178	11,856	13,078	12,099	11,341	12,109
Industry	3,878	2,312	2,225	2,675	2,405	1,669	1,547	2,136
Transport	2,289	2,019	4,636	7,293	8,177	8,585	8,030	8,190
Residential & Commercial	625	430	864	1,358	1,964	1,520	1,457	1,320
Agriculture	-	-	47	30	20	16	20	199
Non-energy	792	444	214	243	259	59	71	94
<b>Natural Gas</b>								
Primary Energy Supply	-	-	-	4	9	2,701	2,530	3,033
Indigenous Production	-	-	-	4	9	2,701	2,530	3,033
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-4	-9	-2,492	-2,311	-2,720
Power Generation	-	-	-	-4	-9	-2,492	-2,311	-2,720
Final Energy Consumption	-	-	-	-	-	12	53	77
Industry	-	-	-	-	-	12	53	77
Transport	-	-	-	-	-	0	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	1,538	1,873	2,264	2,886	3,895	4,865	4,883	5,127
Thermal	1,235	1,395	1,743	2,350	3,224	4,144	4,029	4,390
Hydro	303	478	521	536	671	721	855	736
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	1,287	1,438	1,824	2,287	3,144	3,884	3,928	4,129
Industry	706	775	855	942	1,135	1,325	1,344	1,397
Transport	-	-	-	2	5	8	8	9
Residential & Commercial	505	663	926	1,311	1,979	2,508	2,535	2,681
Agriculture	-	-	43	32	25	42	41	42

## Major Economic Indicators of Philippines

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	48.11	55.03	62.43	69.97	77.69	85.50	87.10	88.72
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	47.58	44.62	56.23	62.59	75.91	94.52	99.57	106.62
Real Term (Billions of 2000 Price and 2000 PPP)	111.45	104.52	131.72	146.62	177.83	221.42	233.25	249.76
Nominal (Billions of Current USD)	32.45	30.73	44.31	74.12	75.91	98.83	117.53	144.04
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	989	811	901	895	977	1,106	1,143	1,202
Real Term (2000 Price and 2000 PPP)	2,316	1,899	2,110	2,096	2,289	2,590	2,678	2,815
Nominal (Current USD)	674	558	710	1,059	977	1,156	1,349	1,624
Nominal GDP & its Components (Billions of Current PHP) *1								
Gross Domestic Product	243.75	571.88	1,077.24	1,905.95	3,354.73	5,444.04	6,031.16	6,647.34
Household Final Consumption Expenditure, etc.	156.82	420.83	767.06	1,411.90	2,335.54	3,772.25	4,229.50	4,611.88
General Government Final Consumption Expenditure	22.10	43.52	108.84	217.05	438.86	527.05	589.93	653.76
Gross Fixed Capital Formation	66.35	94.17	248.95	423.20	710.49	783.40	846.65	977.24
Stock Change	4.55	-12.12	11.21	4.70	-0.42	10.59	28.70	45.21
Exports of Goods and Services	57.46	137.34	296.42	692.95	1,858.58	2,589.74	2,850.90	2,826.57
Imports of Goods and Services	69.40	125.21	358.55	842.07	1,794.72	2,816.24	2,893.20	2,810.17
Real GDP & its Components (Billions of 1985 PHP) *1								
Gross Domestic Product	609.77	571.88	720.69	802.22	972.96	1,211.45	1,276.16	1,366.49
Household Final Consumption Expenditure, etc.	397.40	420.83	531.77	622.99	752.07	947.51	999.73	1,058.18
General Government Final Consumption Expenditure	50.18	43.52	57.04	65.81	79.65	77.20	85.21	90.81
Gross Fixed Capital Formation	150.72	94.17	165.36	184.67	240.06	209.33	217.49	241.11
Stock Change	10.35	-12.12	7.59	2.46	-1.00	4.14	6.80	10.91
Exports of Goods and Services	154.75	137.34	217.87	344.18	445.67	565.74	641.46	676.10
Imports of Goods and Services	179.48	125.21	269.15	428.48	490.77	643.84	655.71	628.56
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	23.5	24.6	22.3	21.5	19.8	19.1	18.8	18.4
Industry	40.5	35.1	35.5	35.4	35.5	32.8	32.5	32.4
Services, etc.	36.0	40.4	42.2	43.1	44.8	48.2	48.7	49.2
Manufacturing Production Index (2000=100) *2	N.A.	11.7	23.4	47.2	68.9	100.0	101.6	98.2
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	5.741	4.607	8.117	17.502	39.783	41.255	47.410	50.466
Imports, c.i.f.	8.295	5.459	13.042	28.341	37.027	49.487	54.078	57.996
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-1.939	-0.482	-4.020	-8.944	-5.971	-7.773	-6.732	-8.391
Current Account	-1.917	-0.036	-2.695	-1.980	-2.225	1.984	5.347	7.119
Overall Balance	0.891	0.838	-0.045	1.235	-0.477	1.662	5.242	8.707
Foreign Exchange Rate (PHP/USD) *1	7.5114	18.6073	24.3105	25.7145	44.1923	55.0855	51.3143	46.1484
Purchasing Power Parity (PHP/International Dollar) *1	4.0505	7.8538	10.0216	14.1151	18.8647	21.7549	22.1801	22.2393
Price Indices								
GDP Deflator (1985=100) *3	40.0	100.0	149.5	237.6	344.8	449.4	472.6	486.5
Wholesale Price Index (2000=100) *2	N.A.	N.A.	N.A.	46.2	65.5	100.0	111.2	110.3
Consumer Price Index (2000=100) *2	9.9	25.0	35.5	56.4	77.0	100.0	106.3	109.2
Growth Rate (%) *3								
Real GDP	5.15	-7.31	3.04	4.68	5.97	4.95	5.34	7.08
Population	2.74	2.68	2.46	2.22	2.04	1.89	1.88	1.86
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	4.2	17.6	9.1	11.2	-0.7
Consumer Price Index	18.2	23.1	12.7	6.7	3.9	7.6	6.3	2.8

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : PHP means Philippine Peso, USD means United States Dollar  
                  : PPP means Purchasing Power Parity





## 3.16 Russia

Energy Balance Table of Russia in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	146,084	-	490,119	-	-	-	-	-	-
<b>2 Import</b>	12,878	117	2,706	37	16	-	-	-	-
<b>3 Export</b>	-53,661	-2,201	-259,872	-95,100	-6,427	-	-	-	-38,079
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	-956	-107	697	-27	-372	-	-	-	-72
<b>6 Total Primary Energy Supply</b>	104,344	-2,191	233,651	-95,090	-6,784	-	-	-	-38,151
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-96,103	18,923	-230,497	215,785	37,593	12,096	11,394	78	66,655
<b>8.1 Main Activity Producer</b>	-51,489	-	-	-3,668	-	-	-	-	-
<b>8.2 Autoproducers</b>	-19,244	-5,002	-702	-9,601	-	-	-	-	-1,966
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-229,794	229,679	37,593	12,096	11,394	78	68,622
<b>8.5 Coal Transformation</b>	-25,370	23,925	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-625	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-586	-666	-3,114	-13,904	-	-	-	-	-2,805
<b>10. Discrepancy</b>	0	-1	0	0	0	-	-	-	-
<b>11 Total Final Energy Consumption</b>	7,655	16,065	40	106,792	30,810	12,096	11,394	78	25,699
<b>12 Industry Sector</b>	3,076	16,027	12	12,472	-	-	-	-	2,619
<b>13 Transport Sector</b>	-	-	8	56,796	30,810	-	11,394	-	13,612
<b>14 Other Sector</b>	4,354	5	20	14,149	-	-	-	78	9,468
<b>14.1 Residential &amp; Commercial</b>	4,265	5	-	9,053	-	-	-	78	4,860
<b>14.2 Agriculture</b>	82	-	20	4,332	-	-	-	-	4,191
<b>14.3 Other</b>	7	-	-	764	-	-	-	-	417
<b>15 Non-energy</b>	225	33	-	23,375	-	12,096	-	-	-

Energy Balance Table of Russia in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	143,178	-	478,206	-	-	-	-	-	-
<b>2 Import</b>	14,159	36	2,332	44	7	-	-	-	-
<b>3 Export</b>	-50,013	-1,267	-249,687	-88,116	-6,748	-	-	-	-38,114
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	569	22	-2,149	-2,122	-187	-	-	-	-321
<b>6 Total Primary Energy Supply</b>	107,893	-1,208	228,702	-90,194	-6,928	-	-	-	-38,435
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-99,057	13,414	-225,826	205,478	36,813	11,986	11,291	77	64,841
<b>8.1 Main Activity Producer</b>	-55,112	-	-	-5,885	-	-	-	-	-
<b>8.2 Autoproducers</b>	-19,599	-6,913	-779	-10,102	-	-	-	-	-1,552
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-225,048	222,220	36,813	11,986	11,291	77	66,412
<b>8.5 Coal Transformation</b>	-24,346	20,327	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-754	-	-	-	-	-19
<b>9. Loss &amp; Own Use</b>	-595	-585	-2,816	-12,462	-	-	-	-	-1,248
<b>10. Discrepancy</b>	0	2	0	0	0	-	-	-	-
<b>11 Total Final Energy Consumption</b>	8,241	11,622	59	102,822	29,885	11,986	11,291	77	25,158
<b>12 Industry Sector</b>	2,628	11,288	5	10,837	-	-	-	-	2,218
<b>13 Transport Sector</b>	-	-	12	57,219	29,885	-	11,291	-	14,883
<b>14 Other Sector</b>	5,375	9	42	12,244	-	-	-	77	8,056
<b>14.1 Residential &amp; Commercial</b>	5,240	8	34	7,578	-	-	-	77	3,576
<b>14.2 Agriculture</b>	133	1	8	4,194	-	-	-	-	4,028
<b>14.3 Other</b>	3	-	-	471	-	-	-	-	452
<b>15 Non-energy</b>	238	326	-	22,522	-	11,986	-	-	-

Energy Balance Table of Russia in 2007 (Continued)

												unit: ktoe
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	521,998	15,435	41,730	418	6,582	-	-	1,222,366
21	-	-	-	-	5,989	-	-	-	-	488	-	22,215
-49,219	-1,375	-	-	-	-155,008	-	-	-	-	-1,588	-	-567,430
-	-	-	-	-	-	-	-	-	-	-	-	-
419	-1	-	-	-	-6,912	-	-	-	97	-	-	-7,208
-48,778	-1,376	-	-	-	366,067	15,435	41,730	418	6,679	-1,101	-	669,942
-	-	-	-	-	-	-	-	-	-	-	-	-
54,380	11,559	13,167	-	8,862	-215,482	-15,435	-41,730	-418	-3,793	87,319	146,749	-134,681
-3,668	-	-	-	-	-195,089	-15,334	-41,730	-418	-	82,710	50,732	-174,287
-6,613	-84	-937	-	-	-18,974	-101	-	-	-3,793	4,609	96,017	43,209
-	-	-	-	-	-	-	-	-	-	-	-	-
64,661	12,267	14,105	-	8,862	-	-	-	-	-	-	-	-115
-	-	-	-	-	-	-	-	-	-	-	-	-1,445
-	-625	-	-	-	-1,419	-	-	-	-	-	-	-2,044
-2,780	-142	-8,176	-	-	-19,411	-	-	-	-100	-25,937	-28,160	-91,877
-0	-0	-	-	0	-2	-	-	-	0	-	-	-2
2,822	10,040	4,991	-	8,862	131,172	-	-	-	2,786	60,281	118,589	443,382
1,568	2,583	4,968	-	735	26,849	-	-	-	372	30,339	44,586	133,732
461	519	-	-	-	34,953	-	-	-	-	7,452	-	99,209
664	3,915	23	-	-	45,271	-	-	-	2,415	22,491	74,003	162,707
272	3,819	23	-	-	44,325	-	-	-	1,908	21,076	71,001	151,634
45	96	-	-	-	946	-	-	-	380	1,391	2,960	10,111
347	-	-	-	-	-	-	-	-	126	23	42	962
129	3,023	-	-	8,127	24,100	-	-	-	-	-	-	47,733

Energy Balance Table of Russia in 2006 (Continued)

												unit: ktoe
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	525,756	15,074	40,791	399	7,382	-	-	1,210,785
27	10	-	-	-	5,815	-	-	-	-	440	-	22,826
-41,912	-1,341	-	-	-	-163,852	-	-	-	-	-1,800	-	-554,735
-	-	-	-	-	-	-	-	-	-	-	-	-
-1,566	-49	-	-	-	-9,093	-	-	-	102	-	-	-12,670
-43,451	-1,380	-	-	-	358,625	15,074	40,791	399	7,484	-1,360	-	666,206
-	-	-	-	-	-	-	-	-	-	-	-	-
48,828	10,893	12,153	-	8,595	-211,312	-15,074	-40,791	-399	-4,713	85,638	153,548	-139,095
-5,885	-	-	-	-	-192,545	-14,972	-40,791	-399	-	81,275	53,214	-175,215
-7,535	-111	-904	-	-	-17,119	-102	-	-	-4,335	4,364	100,334	45,748
-	-	-	-	-	-	-	-	-	-	-	-	-
62,272	11,716	13,057	-	8,595	-	-	-	-	-	-	-	-2,828
-	-	-	-	-	-	-	-	-	-	-	-	-4,019
-24	-712	-	-	-	-1,648	-	-	-	-379	-	-	-2,781
-2,686	-20	-8,508	-	-	-16,649	-	-	-	-342	-25,678	-30,886	-90,014
0	-0	-0	-	-	0	-	-	-	0	-0	-	2
2,691	9,493	3,645	-	8,595	130,665	-	-	-	2,428	58,600	122,661	437,099
1,737	2,332	3,622	-	928	31,587	-	-	-	363	30,406	47,219	134,333
680	479	-	-	-	33,560	-	-	-	-	7,385	-	98,176
274	3,813	23	-	-	43,818	-	-	-	2,065	20,809	75,443	159,804
211	3,691	23	-	-	43,331	-	-	-	1,824	19,343	72,313	149,671
44	122	-	-	-	487	-	-	-	240	1,442	3,118	9,623
19	-	-	-	-	-	-	-	-	1	24	12	510
-	2,869	-	-	7,667	21,699	-	-	-	-	-	-	44,785

## Major Energy Indicators of Russia

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	-	-	-	614,016	613,947	646,730	666,206	669,942
Indigenous Production	-	-	-	940,394	966,406	1,184,697	1,210,785	1,222,366
Import	-	-	-	25,461	31,550	21,942	22,826	22,215
Export	-	-	-	-339,830	-379,289	-553,094	-554,735	-567,430
Final Energy Consumption	-	-	-	461,895	422,916	419,965	437,099	443,382
Industry	-	-	-	167,417	150,377	136,358	134,333	133,732
Transport	-	-	-	81,858	79,956	94,850	98,176	99,209
Residential & Commercial	-	-	-	169,687	162,465	145,234	149,671	151,634
Agriculture	-	-	-	24,290	13,734	9,849	9,623	10,111
Non-energy	-	-	-	7,474	8,157	32,646	44,785	47,733
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	-	-	102,186	110,815	103,338	106,685	102,153
Indigenous Production	-	-	-	103,569	117,020	138,974	143,178	146,084
Import	-	-	-	9,252	14,034	12,405	14,195	12,995
Export	-	-	-	-13,132	-21,748	-45,646	-51,280	-55,862
Transformation Sector	-	-	-	-78,497	-89,215	-84,864	-85,643	-77,180
Power Generation	-	-	-	-68,681	-80,809	-76,822	-81,624	-75,735
Final Energy Consumption	-	-	-	24,592	20,780	17,934	19,863	23,720
Industry	-	-	-	16,195	10,561	11,862	13,915	19,103
Transport	-	-	-	0	-	-	-	-
Residential & Commercial	-	-	-	6,198	8,783	5,235	5,248	4,270
Agriculture	-	-	-	268	252	113	133	82
Non-energy	-	-	-	13	727	668	564	258
<b>Crude Oil</b>								
Primary Energy Supply	-	-	-	189,332	183,850	216,841	228,702	233,651
Indigenous Production	-	-	-	306,632	323,300	468,711	478,206	490,119
Import	-	-	-	8,547	5,921	2,438	2,332	2,706
Export	-	-	-	-122,948	-145,136	-253,850	-249,687	-259,872
Transformation Sector	-	-	-	-183,189	-179,860	-213,894	-225,826	-230,497
Petroleum Refineries	-	-	-	-183,189	-178,793	-213,129	-225,048	-229,794
<b>Petroleum Products</b>								
Primary Energy Supply	-	-	-	-42,125	-53,752	-83,226	-90,194	-95,090
Import	-	-	-	3,174	312	27	44	37
Export	-	-	-	-46,465	-53,848	-84,276	-88,116	-95,100
Transformation Sector	-	-	-	140,129	155,815	191,508	205,478	215,785
Power Generation	-	-	-	-37,572	-22,175	-16,002	-15,988	-13,269
Petroleum Refineries	-	-	-	177,701	177,990	207,510	222,220	229,679
Final Energy Consumption	-	-	-	89,418	91,932	95,167	102,822	106,792
Industry	-	-	-	10,572	19,270	18,616	10,837	12,472
Transport	-	-	-	46,875	47,767	53,842	57,219	56,796
Residential & Commercial	-	-	-	5,669	5,449	7,409	7,578	9,053
Agriculture	-	-	-	10,425	5,903	4,214	4,194	4,332
Non-energy	-	-	-	7,461	7,429	10,559	22,522	23,375
<b>Natural Gas</b>								
Primary Energy Supply	-	-	-	316,635	319,008	349,591	358,625	366,067
Indigenous Production	-	-	-	480,551	470,739	515,726	525,756	521,998
Import	-	-	-	2,908	10,526	6,200	5,815	5,989
Export	-	-	-	-154,019	-156,592	-167,386	-163,852	-155,008
Transformation Sector	-	-	-	-189,787	-185,982	-205,791	-211,312	-215,482
Power Generation	-	-	-	-189,787	-185,982	-203,738	-209,664	-214,063
Final Energy Consumption	-	-	-	118,151	117,173	128,025	130,665	131,172
Industry	-	-	-	39,751	42,763	30,112	31,587	26,849
Transport	-	-	-	29,369	26,939	33,837	33,560	34,953
Residential & Commercial	-	-	-	47,594	45,579	41,693	43,331	44,325
Agriculture	-	-	-	636	506	549	487	946
Non-energy	-	-	-	-	-	21,419	21,699	24,100
<b>Electricity</b>								
Power Generation	-	-	-	74,096	75,704	81,965	85,638	87,319
Thermal	-	-	-	32,986	27,417	27,983	29,773	30,154
Hydro	-	-	-	15,171	14,222	15,016	15,074	15,435
Nuclear	-	-	-	25,939	34,065	38,967	40,791	41,730
Final Energy Consumption	-	-	-	53,176	52,333	55,898	58,600	60,281
Industry	-	-	-	27,005	26,867	28,369	30,406	30,339
Transport	-	-	-	5,604	5,239	7,153	7,385	7,452
Residential & Commercial	-	-	-	16,006	17,629	18,908	19,343	21,076
Agriculture	-	-	-	4,561	2,598	1,448	1,442	1,391

## Major Economic Indicators of Russia

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	139.01	143.86	148.29	148.14	146.30	143.15	142.50	142.10
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	N.A.	N.A.	385.90	239.72	259.72	349.86	375.75	406.19
Real Term (Billions of 2000 Price and 2000 PPP)	N.A.	N.A.	1,657.15	1,029.40	1,115.27	1,502.38	1,613.56	1,744.26
Nominal (Billions of Current USD)	N.A.	N.A.	N.A.	313.33	259.72	764.57	988.56	1,289.54
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	N.A.	N.A.	2,602	1,618	1,775	2,444	2,637	2,858
Real Term (2000 Price and 2000 PPP)	N.A.	N.A.	11,175	6,949	7,623	10,495	11,323	12,275
Nominal (Current USD)	N.A.	N.A.	N.A.	2,115	1,775	5,341	6,937	9,075
Nominal GDP & its Components (Billions of Current RUR) *1								
Gross Domestic Product	N.A.	N.A.	0.64	1,428.50	7,305.60	21,625.40	26,879.80	32,987.40
Household Final Consumption Expenditure, etc.	N.A.	N.A.	0.31	744.10	3,374.30	10,728.20	13,039.90	15,990.50
General Government Final Consumption Expenditure	N.A.	N.A.	0.13	272.50	1,102.50	3,590.70	4,576.10	5,820.40
Gross Fixed Capital Formation	N.A.	N.A.	0.18	301.10	1,232.00	3,836.90	4,968.40	6,951.10
Stock Change	N.A.	N.A.	7.38	17.25	4.75	17.74	28.32	45.01
Exports of Goods and Services	N.A.	N.A.	0.12	418.40	3,218.90	7,607.30	9,079.30	10,057.20
Imports of Goods and Services	N.A.	N.A.	0.12	369.90	1,755.80	4,648.30	5,656.80	7,186.70
Real GDP & its Components (Billions of 2000 RUR) *1								
Gross Domestic Product	N.A.	N.A.	10,855.15	6,743.05	7,305.60	9,841.36	10,569.62	11,425.76
Household Final Consumption Expenditure, etc.	N.A.	N.A.	3,644.80	3,357.54	3,374.30	5,333.65	5,924.25	6,674.56
General Government Final Consumption Expenditure	N.A.	N.A.	1,466.92	1,031.55	1,102.50	1,186.20	1,215.85	1,276.64
Gross Fixed Capital Formation	N.A.	N.A.	6,142.42	1,542.16	1,232.00	1,960.91	2,307.99	2,788.05
Stock Change	N.A.	N.A.	0.01	62.30	133.70	501.80	768.40	1,150.90
Exports of Goods and Services	N.A.	N.A.	3,926.52	2,514.27	3,218.90	4,954.69	5,316.38	5,656.63
Imports of Goods and Services	N.A.	N.A.	4,678.68	1,901.89	1,755.80	4,041.35	4,926.41	6,271.32
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	N.A.	N.A.	5.5	6.0	5.8	5.4	5.2	5.0
Industry	N.A.	N.A.	42.6	33.1	33.9	33.6	32.5	31.9
Services, etc.	N.A.	N.A.	37.8	49.6	49.7	49.6	50.8	51.4
Industrial Production Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	N.A.	N.A.	N.A.	81.095	105.565	243.798	303.551	354.403
Imports, c.i.f.	N.A.	N.A.	N.A.	60.945	44.659	125.434	164.281	223.486
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	N.A.	N.A.	19.816	60.172	118.364	139.269	130.915
Current Account	N.A.	N.A.	N.A.	6.963	46.839	84.602	94.686	77.012
Overall Balance	N.A.	N.A.	N.A.	-8.325	13.923	64.968	107.466	148.928
Foreign Exchange Rate (RUR/USD) *1	N.A.	N.A.	N.A.	4.5592	28.1292	28.2844	27.1910	25.5808
Purchasing Power Parity (RUR/International Dollar) *1	N.A.	N.A.	0.0005	1.5069	6.5505	12.7361	14.2896	15.8026
Price Indices								
GDP Deflator (2000=100) *3	N.A.	N.A.	0.0	21.2	100.0	219.7	254.3	288.7
Producer Price Index (2005=100) *3	N.A.	N.A.	N.A.	10.2	44.3	100.0	112.4	128.2
Consumer Price Index (2000=100) *3	N.A.	N.A.	N.A.	10.3	50.1	100.0	109.7	119.6
Growth Rate (%)								
Real GDP (*3)	N.A.	N.A.	-3.00	-4.14	10.00	6.40	7.40	8.10
Population (*3)	0.71	0.78	0.39	-0.13	0.00	-0.49	-0.45	-0.28
Price (*2)								
Producer Price Index	N.A.	N.A.	N.A.	236.5	46.5	20.6	12.4	14.1
Consumer Price Index	N.A.	N.A.	N.A.	197.5	20.8	12.7	9.7	9.0

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : RUR means Russian Ruble, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.17 Singapore

## Energy Balance Table of Singapore in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	-	-	-	-	-	-	-	-	-
<b>2 Import</b>	-	-	51,246	60,479	9,026	3,738	2,697	303	6,204
<b>3 Export</b>	-	-	-94	-62,448	-12,382	-1,894	-7,676	-1,077	-17,556
<b>4 International Marine Bunkers</b>	-	-	-	-31,546	-	-	-	-	-
<b>5 Stock Changes</b>	-	-	-	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	-	-	51,152	-33,515	-3,356	1,844	-4,979	-774	-11,352
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-	-	-51,152	46,760	4,522	4,920	8,700	871	11,882
8.1 Main Activity Producer	-	-	-	-1,734	-	-	-	-	-46
8.2 Autoproducers	-	-	-	-	-	-	-	-	-
8.3 Gas Processing	-	-	-	-128	-	-128	-	-	-
8.4 Petroleum Refineries	-	-	-51,152	48,622	4,522	5,048	8,700	871	11,928
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-717	-	-	-	-	-
<b>10. Discrepancy</b>	-	-	-0	-0	0	-	-0	-0	-0
<b>11 Total Final Energy Consumption</b>	-	-	-	12,527	1,166	6,764	3,721	97	530
<b>12 Industry Sector</b>	-	-	-	6,861	-	6,764	-	97	-
<b>13 Transport Sector</b>	-	-	-	5,417	1,166	-	3,721	-	530
<b>14 Other Sector</b>	-	-	-	-	-	-	-	-	-
14.1 Residential & Commercial	-	-	-	-	-	-	-	-	-
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	250	-	-	-	-	-

Note: Above Energy Balance Table were estimated by C.A.

## Energy Balance Table of Singapore in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	-	-	-	-	-	-	-	-	-
<b>2 Import</b>	-	5	52,745	54,414	7,788	3,652	2,536	303	6,114
<b>3 Export</b>	-	-	-	-58,260	-10,858	-1,991	-7,479	-1,077	-16,673
<b>4 International Marine Bunkers</b>	-	-	-	-31,002	-	-	-	-	-
<b>5 Stock Changes</b>	-	-	-	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	-	5	52,745	-34,848	-3,070	1,661	-4,943	-774	-10,558
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-	-5	-52,745	47,668	4,149	5,022	8,494	851	11,003
8.1 Main Activity Producer	-	-	-	-1,212	-	-	-	-	-130
8.2 Autoproducers	-	-	-	-	-	-	-	-	-
8.3 Gas Processing	-	-5	-	-128	-	-128	-	-	-
8.4 Petroleum Refineries	-	-	-52,745	49,008	4,149	5,150	8,494	851	11,132
8.5 Coal Transformation	-	-	-	-	-	-	-	-	-
8.6 Other Transformation	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-736	-	-	-	-	-
<b>10. Discrepancy</b>	-	-	-	-0	-0	-	0	-0	-0
<b>11 Total Final Energy Consumption</b>	-	-	-	12,084	1,079	6,683	3,552	77	445
<b>12 Industry Sector</b>	-	-	-	6,760	-	6,683	-	77	-
<b>13 Transport Sector</b>	-	-	-	5,075	1,079	-	3,552	-	445
<b>14 Other Sector</b>	-	-	-	-	-	-	-	-	-
14.1 Residential & Commercial	-	-	-	-	-	-	-	-	-
14.2 Agriculture	-	-	-	-	-	-	-	-	-
14.3 Other	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	250	-	-	-	-	-

Note: Above Energy Balance Table were estimated by C.A.



Energy Balance Table of Singapore in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-	-	104	-	-	104
38,013	8	-	-	490	5,960	-	-	-	-	-	-	117,685
-18,352	-692	-	-	-2,818	-	-	-	-	-	-	-	-62,542
-31,546	-	-	-	-	-	-	-	-	-	-	-	-31,546
-	-	-	-	-	-	-	-	-	-	-	-	-
-11,886	-684	-	-	-2,328	5,960	-	-	-	104	-	-	23,701
-	-	-	-	-	-	-	-	-	-	-	-	-
11,886	684	717	-	2,578	-5,849	-	-	-	-104	3,538	-	-6,809
-1,688	-	-	-	-	-5,960	-	-	-	-104	3,538	-	-4,261
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	110	-	-	-	-	-	-	-18
13,574	684	717	-	2,578	-	-	-	-	-	-	-	-2,531
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-717	-	-	-	-	-	-	-	-319	-	-1,036
-0	-	-	-	0	0	-	-	-	-	-32	-	-32
-	-	-	-	250	110	-	-	-	-	3,186	-	15,824
-	-	-	-	-	47	-	-	-	-	1,343	-	8,251
-	-	-	-	-	-	-	-	-	-	-	-	5,417
-	-	-	-	-	63	-	-	-	-	1,843	-	1,906
-	-	-	-	-	63	-	-	-	-	1,839	-	1,902
-	-	-	-	-	-	-	-	-	-	4	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	250	-	-	-	-	-	-	-	250

Energy Balance Table of Singapore in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-	-	295	-	-	295
33,469	3	-	-	548	5,649	-	-	-	-	-	-	112,813
-16,696	-705	-	-	-2,782	-	-	-	-	-	-	-	-58,260
-31,002	-	-	-	-	-	-	-	-	-	-	-	-31,002
-	-	-	-	-	-	-	-	-	-	-	-	-
-14,229	-702	-	-	-2,234	5,649	-	-	-	295	-	-	23,845
-	-	-	-	-	-	-	-	-	-	-	-	-
14,229	702	736	-	2,484	-5,541	-	-	-	-295	3,392	-	-7,525
-1,082	-	-	-	-	-5,649	-	-	-	-295	3,392	-	-3,764
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	108	-	-	-	-	-	-	-25
15,311	702	736	-	2,484	-	-	-	-	-	-	-	-3,736
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-736	-	-	-	-	-	-	-	-303	-	-1,039
-	0	-	-	0	-0	-	-	-	-	-31	-	-31
-	-	-	-	250	108	-	-	-	-	3,058	-	15,251
-	-	-	-	-	46	-	-	-	-	1,294	-	8,100
-	-	-	-	-	-	-	-	-	-	-	-	5,075
-	-	-	-	-	62	-	-	-	-	1,765	-	1,827
-	-	-	-	-	62	-	-	-	-	1,761	-	1,823
-	-	-	-	-	-	-	-	-	-	4	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	250	-	-	-	-	-	-	-	250

## Major Energy Indicators of Singapore

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	1,976	8,774	9,896	15,203	20,421	22,991	23,845	23,701
Indigenous Production	2	3	19	50	101	194	295	104
Import	29,359	38,352	59,503	79,202	79,752	106,612	112,813	117,685
Export	-22,640	-24,836	-36,556	-47,342	-39,565	-55,719	-58,260	-62,542
Final Energy Consumption	2,070	3,356	5,322	7,477	9,367	14,744	15,251	15,824
Industry	343	1,025	1,907	2,589	3,514	8,058	8,100	8,251
Transport	1,346	1,715	2,368	3,680	4,159	4,726	5,075	5,417
Residential & Commercial	294	434	763	980	1,441	1,707	1,823	1,902
Agriculture	-	-	-	2	3	4	4	4
Non-energy	86	181	284	227	250	250	250	250
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	-	-	0	0	1	5	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	17	0	1	5	-
Export	-	-	-	-16	-0	-	-	-
Transformation Sector	-	-	-	-	-	-1	-5	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	24,182	28,389	41,286	51,984	41,585	54,738	52,745	51,152
Indigenous Production	-	-	-	-	-	-	-	-
Import	24,255	28,472	41,286	52,046	41,585	54,738	52,745	51,246
Export	-73	-82	-0	-62	-	-	-	-94
Transformation Sector	-30,180	-34,886	-43,571	-51,984	-41,585	-54,738	-52,745	-51,152
Petroleum Refineries	-30,180	-34,886	-43,571	-51,984	-41,585	-54,738	-52,745	-51,152
<b>Petroleum Products</b>								
Primary Energy Supply	-22,200	-19,615	-31,409	-38,007	-22,207	-37,176	-34,848	-33,515
Import	5,104	9,880	18,217	25,964	37,225	46,639	54,414	60,479
Export	-22,559	-24,750	-36,555	-47,264	-39,565	-55,719	-58,260	-62,448
Transformation Sector	25,754	29,580	36,072	43,151	32,613	49,632	47,668	46,760
Power Generation	-1,575	-2,021	-3,388	-3,460	-5,563	-1,724	-1,212	-1,734
Petroleum Refineries	27,381	31,651	39,530	46,710	38,305	51,484	49,008	48,622
Final Energy Consumption	1,506	2,559	4,046	5,653	6,757	11,688	12,084	12,527
Industry	73	663	1,296	1,763	2,372	6,713	6,760	6,861
Transport	1,346	1,715	2,352	3,663	4,135	4,726	5,075	5,417
Residential & Commercial	-	-	115	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	86	181	284	227	250	250	250	250
<b>Natural Gas</b>								
Primary Energy Supply	-	-	-	1,176	942	5,234	5,649	5,960
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	1,176	942	5,234	5,649	5,960
Export	-	-	-	-	-	-	-	-
Transformation Sector	43	40	56	-1,090	-836	-5,138	-5,541	-5,849
Power Generation	-	-	-	-1,176	-942	-5,234	-5,649	-5,960
Final Energy Consumption	38	38	55	84	105	96	108	110
Industry	16	16	32	53	66	55	46	47
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	22	21	23	30	39	41	62	63
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	599	853	1,343	1,913	2,723	3,286	3,392	3,538
Thermal	599	853	1,343	1,913	2,723	3,286	3,392	3,538
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	525	758	1,221	1,741	2,505	2,960	3,058	3,186
Industry	253	346	580	772	1,076	1,290	1,294	1,343
Transport	-	-	16	17	25	-	-	-
Residential & Commercial	272	413	625	949	1,401	1,666	1,761	1,839
Agriculture	-	-	-	2	3	4	4	4

## Major Economic Indicators of Singapore

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	2.41	2.74	3.05	3.52	4.03	4.27	4.40	4.59
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	21.83	29.73	44.66	68.23	92.72	114.69	124.27	133.92
Real Term (Billions of 2000 Price and 2000 PPP)	31.43	42.81	64.31	98.25	133.51	165.15	178.94	192.84
Nominal (Billions of Current USD)	11.73	17.74	36.84	84.29	92.72	120.95	139.18	166.95
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	9,042	10,866	14,658	19,359	23,019	26,886	28,234	29,185
Real Term (2000 Price and 2000 PPP)	13,021	15,647	21,107	27,876	33,147	38,715	40,656	42,026
Nominal (Current USD)	4,859	6,485	12,091	23,915	23,019	28,354	31,621	36,384
Nominal GDP & its Components (Billions of Current SGD) *1								
Gross Domestic Product	25.12	39.04	66.78	119.47	159.84	201.31	221.14	251.61
Household Final Consumption Expenditure, etc.	12.91	17.55	30.91	50.49	67.53	81.78	87.27	97.00
General Government Final Consumption Expenditure	2.45	5.54	6.76	10.10	17.34	21.42	23.45	24.45
Gross Fixed Capital Formation	10.23	16.55	22.00	40.33	48.90	42.90	48.77	60.42
Stock Change	1.43	0.13	2.77	0.87	4.32	-2.15	-4.35	-8.22
Exports of Goods and Services	N.A.	N.A.	N.A.	N.A.	N.A.	476.00	538.34	579.12
Imports of Goods and Services	N.A.	N.A.	N.A.	N.A.	N.A.	418.47	471.50	499.43
Real GDP & its Components (Billions of 1995 SGD) *1								
Gross Domestic Product	37.63	51.25	77.00	117.63	159.84	197.72	214.23	230.87
Household Final Consumption Expenditure, etc.	N.A.	N.A.	N.A.	N.A.	N.A.	81.15	N.A.	N.A.
General Government Final Consumption Expenditure	N.A.	N.A.	N.A.	N.A.	N.A.	20.23	N.A.	N.A.
Gross Fixed Capital Formation	N.A.	N.A.	N.A.	N.A.	N.A.	43.54	N.A.	N.A.
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	-7.60	N.A.	N.A.
Exports of Goods and Services	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Imports of Goods and Services	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	1.0	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Industry	35.6	32.9	32.5	32.6	33.1	30.7	31.4	31.2
Services, etc.	55.3	58.5	59.1	59.5	59.8	62.5	62.0	61.9
Manufacturing Production Index (2000=100) *2	19.9	21.3	38.8	57.6	81.4	100.0	111.9	118.4
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	19.376	22.812	52.730	118.268	137.804	229.649	271.807	299.298
Imports, c.i.f.	24.007	26.285	60.774	124.507	134.545	200.047	238.710	263.155
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-2.971	-1.518	-1.633	8.459	13.956	37.036	43.433	49.099
Current Account	-1.563	-0.004	3.122	14.377	10.719	22.223	29.800	39.106
Overall Balance	0.663	1.337	5.431	8.637	6.822	12.315	17.007	19.640
Foreign Exchange Rate (SGD/USD) *1	2.1412	2.2001	1.8125	1.4174	1.7240	1.6644	1.5889	1.5071
Purchasing Power Parity (SGD/International Dollar) *1	1.4799	1.3089	1.2724	1.3204	1.1972	1.0786	1.0601	1.0902
Price Indices								
GDP Deflator (1995=100) *3	66.7	76.2	86.7	101.6	100.0	101.8	103.2	109.0
Wholesale Price Index (2000=100) *2	106.9	99.6	93.1	81.3	87.7	100.0	105.0	105.3
Consumer Price Index (2000=100) *2	65.3	76.6	81.7	92.6	96.9	100.0	101.0	103.1
Growth Rate (%) *3								
Real GDP	9.71	-1.44	9.22	8.15	10.06	7.31	8.35	7.77
Population	1.26	0.15	3.96	3.09	1.75	2.38	3.18	4.25
Price								
Wholesale Price Index	19.6	-2.2	1.7	0.0	10.1	9.7	5.0	0.3
Consumer Price Index	8.5	0.5	3.5	1.7	1.4	0.4	1.0	2.1

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : SGD means Singapore Dollar, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.18 Chinese Taipei

Energy Balance Table of Chinese Taipei in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	-	-	16	-	-	-	-	-	-
<b>2 Import</b>	40,087	370	51,955	16,007	-	10,343	-	-	-
<b>3 Export</b>	-	-7	-	-17,779	-4,966	-	-1,946	-	-9,070
<b>4 International Marine Bunkers</b>	-	-	-	-2,087	-	-	-	-	-189
<b>5 Stock Changes</b>	-150	-8	230	57	34	-173	-	-1	155
<b>6 Total Primary Energy Supply</b>	39,938	355	52,202	-3,803	-4,932	10,170	-1,946	-1	-9,104
<b>7 Transfers</b>	-	-	-	-1,390	4,745	-3,943	-10	-	-31
<b>8 Total Transformation Sector</b>	-34,017	2,148	-52,049	49,644	7,973	9,307	4,263	-	14,224
<b>8.1 Main Activity Producer</b>	-23,223	-	-	-2,704	-	-	-	-	-121
<b>8.2 Autoproducers</b>	-6,924	-543	-	-1,250	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-52,049	53,598	7,973	9,307	4,263	-	14,345
<b>8.5 Coal Transformation</b>	-3,871	2,691	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-886	-829	-	-2,352	-2	-	-	-0	-46
<b>10. Discrepancy</b>	250	-369	-153	827	31	-	96	14	-173
<b>11 Total Final Energy Consumption</b>	5,285	1,305	-	42,926	7,815	15,535	2,403	13	4,870
<b>12 Industry Sector</b>	5,090	1,181	-	5,120	7	-	-	1	167
<b>13 Transport Sector</b>	-	-	-	14,179	7,766	-	2,233	-	3,932
<b>14 Other Sector</b>	-	-	-	2,771	43	-	170	12	770
<b>14.1 Residential &amp; Commercial</b>	-	-	-	2,406	42	-	170	12	428
<b>14.2 Agriculture</b>	-	-	-	4	0	-	-	-	1
<b>14.3 Other</b>	-	-	-	361	-	-	-	-	342
<b>15 Non-energy</b>	194	123	-	20,856	-	15,535	-	-	-

Energy Balance Table of Chinese Taipei in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	-	-	21	-	-	-	-	-	-
<b>2 Import</b>	40,872	225	52,199	11,173	20	6,389	-	-	73
<b>3 Export</b>	-	-	-	-14,937	-3,582	-	-1,818	-	-7,826
<b>4 International Marine Bunkers</b>	-	-	-	-2,330	-	-	-	-	-193
<b>5 Stock Changes</b>	-28	-	-293	-725	-125	-82	-151	-1	-159
<b>6 Total Primary Energy Supply</b>	40,844	225	51,927	-6,818	-3,687	6,307	-1,968	-1	-8,105
<b>7 Transfers</b>	-	-	-	2,336	4,895	-3,724	-	-	65
<b>8 Total Transformation Sector</b>	-33,342	1,914	-52,244	48,932	6,742	9,470	4,463	-	13,535
<b>8.1 Main Activity Producer</b>	-22,379	-	-	-3,188	-	-	-	-	-246
<b>8.2 Autoproducers</b>	-6,739	-532	-	-1,371	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-52,244	53,491	6,742	9,470	4,463	-	13,781
<b>8.5 Coal Transformation</b>	-4,225	2,447	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-2,629	-4	-	-0	-0	-30
<b>10. Discrepancy</b>	-2,258	-129	316	-3,023	92	261	-181	15	-278
<b>11 Total Final Energy Consumption</b>	5,244	2,010	-	38,798	8,037	12,314	2,314	14	5,188
<b>12 Industry Sector</b>	5,234	2,010	-	7,321	6	-	1	6	180
<b>13 Transport Sector</b>	-	-	-	14,680	7,987	-	2,301	-	4,113
<b>14 Other Sector</b>	-	-	-	2,787	44	-	12	8	895
<b>14.1 Residential &amp; Commercial</b>	-	-	-	2,234	43	-	12	8	360
<b>14.2 Agriculture</b>	-	-	-	4	0	-	-	-	1
<b>14.3 Other</b>	-	-	-	550	-	-	-	-	534
<b>15 Non-energy</b>	9	-	-	14,009	-	12,314	-	-	-

Energy Balance Table of Chinese Taipei in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	371	718	10,565	133	2,446	-	-	14,249	
2,437	1,306	-	-	1,921	11,393	-	-	-	90	-	-	119,902	
-306	-365	-	-	-1,128	-	-	-	-	-	-	-	-17,787	
-1,894	-	-	-	-5	-	-	-	-	-	-	-	-2,087	
44	-1	-	-	-	122	-	-	-	-	-	-	252	
281	939	-	-	789	11,886	718	10,565	133	2,536	-	-	114,529	
-2,330	200	-	-	-20	-	-	-	-	-	-	-	-1,390	
6,858	1,744	1,408	-	3,867	-9,317	-718	-10,565	-38	-2,536	20,908	-	-36,540	
-2,583	-	-	-	-	-8,414	-718	-10,565	-37	-	17,296	-	-28,365	
-682	-	-35	-	-533	-160	-	-	-1	-2,446	3,613	-	-7,712	
-	-	-	-	-	-743	-	-	-	-	-	-	-743	
10,123	1,744	1,443	-	4,400	-	-	-	-	-	-	-	1,550	
-	-	-	-	-	-	-	-	-	-	-	-	-1,180	
-	-	-	-	-	-	-	-	-	-90	-	-	-90	
-713	-183	-1,408	-	-	-367	-1	-	-0	-	-1,967	-	-6,402	
796	-9	-0	-	72	-150	1	-	0	-	-652	-	-247	
4,892	2,691	-	-	4,708	2,051	-	-	95	-	18,289	-	69,951	
4,273	673	-	-	-	929	-	-	-	-	10,265	-	22,586	
186	62	-	-	-	-	-	-	-	-	71	-	14,250	
433	1,344	-	-	-	1,122	-	-	95	-	7,953	-	11,941	
410	1,344	-	-	-	1,122	-	-	95	-	7,728	-	11,351	
3	0	-	-	-	-	-	-	-	-	138	-	141	
20	-	-	-	-	-	-	-	-	-	88	-	449	
-	613	-	-	4,708	-	-	-	-	-	-	-	21,173	

Energy Balance Table of Chinese Taipei in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	412	685	10,390	108	1,773	-	-	13,389	
2,323	1,273	-	-	1,097	10,673	-	-	-	-	-	-	115,142	
-318	-374	-	-	-1,020	-	-	-	-	-	-	-	-14,937	
-2,134	-	-	-	-3	-	-	-	-	-	-	-	-2,330	
-173	-34	-	-	-	-128	-	-	-	-	-	-	-1,173	
-302	866	-	-	73	10,957	685	10,390	108	1,773	-	-	110,091	
1,100	-	-	-	-	-	-	-	-	-	-	-	2,336	
7,557	1,901	1,372	-	3,893	-8,489	-685	-10,390	-16	-1,773	20,242	-	-35,850	
-2,942	-	-	-	-	-7,574	-685	-10,390	-15	-	16,777	-	-27,455	
-810	-	-39	-	-522	-163	-	-	-0	-1,773	3,465	-	-7,114	
-	-	-	-	-	-751	-	-	-	-	-	-	-751	
11,309	1,901	1,411	-	4,415	-	-	-	-	-	-	-	1,248	
-	-	-	-	-	-	-	-	-	-	-	-	-1,778	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-834	-390	-1,372	-	-	-304	-	-	-	-	-2,946	-	-5,879	
-2,541	-264	-	-	-126	-155	-	-	-	-	-0	-	-5,248	
4,979	2,112	-	-	3,840	2,010	-	-	92	-	17,296	-	65,449	
4,271	712	-	-	2,144	900	-	-	-	-	9,327	-	24,792	
223	56	-	-	-	-	-	-	-	-	88	-	14,768	
484	1,345	-	-	-	1,110	-	-	92	-	7,880	-	11,870	
466	1,345	-	-	-	1,110	-	-	92	-	7,656	-	11,093	
2	0	-	-	-	-	-	-	-	-	133	-	137	
16	-	-	-	-	-	-	-	-	-	91	-	640	
-	-	-	-	1,695	-	-	-	-	-	-	-	14,019	

## Major Energy Indicators of Chinese Taipei

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	25,092	32,573	45,989	62,407	79,272	106,638	110,091	114,529
Indigenous Production	5,654	10,340	10,748	10,913	11,476	13,152	13,389	14,249
Import	20,642	23,922	39,723	57,083	78,713	111,997	115,142	119,902
Export	-297	-1,562	-335	-1,350	-2,294	-15,590	-14,937	-17,787
Final Energy Consumption	16,997	21,305	29,814	38,998	53,848	64,251	65,449	69,951
Industry	9,922	12,180	15,235	19,784	23,386	23,738	24,792	22,586
Transport	3,320	4,287	7,248	10,630	12,455	14,701	14,768	14,250
Residential & Commercial	2,567	3,478	4,992	6,678	9,041	11,023	11,093	11,351
Agriculture	764	896	1,033	1,022	948	127	137	141
Non-energy	741	2,047	1,306	884	8,063	13,692	14,019	21,173
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,571	6,734	10,562	16,041	27,493	39,183	41,069	40,293
Indigenous Production	1,516	1,094	278	139	49	-	-	-
Import	37	6,251	11,389	17,655	27,911	39,715	41,097	40,457
Export	-5	-5	-0	-	-	-	-	-7
Transformation Sector	-785	-2,980	-4,641	-8,156	-18,605	-30,217	-31,428	-31,870
Power Generation	-1,489	-3,308	-5,145	-8,820	-19,428	-28,585	-29,650	-30,690
Final Energy Consumption	1,799	3,724	5,903	7,881	8,391	6,706	7,254	6,589
Industry	1,712	3,659	5,897	7,881	8,388	6,646	7,245	6,272
Transport	3	0	-	-	-	-	-	-
Residential & Commercial	75	60	6	-	0	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	49	60	9	317
<b>Crude Oil</b>								
Primary Energy Supply	17,839	17,107	20,512	28,885	36,188	54,303	51,927	52,202
Indigenous Production	181	101	156	53	32	29	21	16
Import	17,605	16,106	21,105	28,679	36,876	54,576	52,199	51,955
Export	-	-	-	-	-	-	-	-
Transformation Sector	-17,839	-17,107	-20,512	-28,885	-36,188	-54,431	-52,244	-52,049
Petroleum Refineries	-17,839	-17,107	-20,512	-28,885	-36,188	-54,431	-52,244	-52,049
<b>Petroleum Products</b>								
Primary Energy Supply	1,725	-413	3,918	3,872	-803	-9,960	-6,818	-3,803
Import	3,001	1,565	6,467	7,795	8,757	7,864	11,173	16,007
Export	-292	-1,557	-335	-1,350	-2,294	-15,590	-14,937	-17,779
Transformation Sector	10,661	15,019	14,359	19,573	33,331	50,566	48,932	49,644
Power Generation	-5,217	-1,125	-4,825	-6,653	-6,171	-3,882	-4,559	-3,954
Petroleum Refineries	15,878	16,143	19,184	26,226	39,502	54,448	53,491	53,598
Final Energy Consumption	10,688	12,640	16,618	20,538	30,197	38,737	38,798	42,926
Industry	5,049	5,595	5,371	6,551	6,813	7,319	7,321	5,120
Transport	3,290	4,255	7,210	10,590	12,362	14,586	14,680	14,179
Residential & Commercial	1,232	1,530	1,836	1,667	2,255	2,316	2,234	2,406
Agriculture	701	799	895	846	754	4	4	4
Non-energy	741	2,047	1,306	884	8,015	13,632	14,009	20,856
<b>Natural Gas</b>								
Primary Energy Supply	1,569	1,063	1,728	3,642	5,596	10,476	10,957	11,886
Indigenous Production	1,569	1,063	1,045	754	598	487	412	371
Import	-	-	762	2,953	5,169	9,842	10,673	11,393
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-1,232	-2,027	-3,378	-8,113	-8,489	-9,317
Power Generation	-	-	-241	-1,210	-3,393	-7,518	-7,738	-8,575
Final Energy Consumption	1,339	872	926	1,534	1,490	1,986	2,010	2,051
Industry	1,078	449	392	841	682	862	900	929
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	261	423	534	693	808	1,124	1,110	1,122
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	3,664	4,778	7,481	10,570	15,897	19,561	20,242	20,908
Thermal	1,276	-3,304	-1,788	603	5,101	8,464	9,166	9,626
Hydro	252	596	704	764	763	680	685	718
Nuclear	2,137	7,486	8,565	9,203	10,034	10,417	10,390	10,565
Final Energy Consumption	3,171	4,069	6,367	9,045	13,770	16,734	17,296	18,289
Industry	2,083	2,476	3,575	4,511	7,504	8,911	9,327	10,265
Transport	26	31	37	40	94	115	88	71
Residential & Commercial	999	1,465	2,616	4,318	5,978	7,494	7,656	7,728
Agriculture	63	97	139	176	195	122	133	138



## Major Economic Indicators of Chinese Taipei

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	17.81	19.26	20.35	21.30	22.22	22.69	22.79	22.87
Gross Domestic Product *2								
Real Term (Billions of 2000 Price and 2000 USD)	75.13	104.03	161.83	229.52	304.09	356.23	373.33	394.62
Real Term (Billions of 2000 Price and 2000 PPP)	114.92	159.12	247.53	351.08	465.14	544.89	571.04	603.61
Nominal (Billions of Current USD)	42.27	63.42	163.18	265.96	304.09	348.70	365.57	389.51
GDP per Capita *2								
Real Term (2000 Price and 2000 USD)	4,220	5,402	7,951	10,774	13,688	15,700	16,381	17,257
Real Term (2000 Price and 2000 PPP)	6,454	8,263	12,162	16,480	20,937	24,015	25,057	26,397
Nominal (Current USD)	2,374	3,293	8,017	12,484	13,688	15,368	16,041	17,034
Nominal GDP & its Components (Billions of Current TWD) *1								
Gross Domestic Product	1,522.27	2,527.48	4,423.74	7,252.76	10,032.00	11,454.73	11,917.60	12,635.77
Private Consumption, etc.	785.92	1,291.13	2,416.94	4,219.88	6,087.24	7,022.57	7,178.46	7,442.80
General Government Consumption	248.17	417.25	776.56	1,088.51	1,391.55	1,498.30	1,504.82	1,529.20
Fixed Investment	458.48	472.59	987.07	1,800.90	2,394.00	2,438.44	2,531.37	2,667.97
Stock Change	47.47	5.02	28.54	26.85	-60.40	10.84	31.33	49.49
Exports of Goods & NF Services	783.27	1,346.52	2,021.48	3,423.65	5,392.44	7,358.02	8,304.11	9,284.26
Imports of Goods & NF Services	801.03	1,005.03	1,806.85	3,307.04	5,172.83	6,873.43	7,632.50	8,337.95
Real GDP & its Components (Billions of 2001 TWD) *1								
Gross Domestic Product	2,490.66	3,448.65	5,364.73	7,609.03	10,081.06	11,809.55	12,376.34	13,082.18
Private Consumption, etc.	1,371.09	1,891.71	3,138.11	4,549.01	6,088.18	6,865.20	6,986.00	7,147.60
General Government Consumption	518.36	688.43	1,051.45	1,231.14	1,397.06	1,449.40	1,443.27	1,456.50
Fixed Investment	533.52	547.97	1,025.15	1,728.68	2,384.93	2,373.59	2,394.28	2,439.75
Stock Change	44.72	3.76	29.34	23.86	-58.26	9.29	32.16	46.41
Exports of Goods & NF Services	804.38	1,275.25	2,179.60	3,381.18	5,379.95	7,460.90	8,226.33	8,951.87
Imports of Goods & NF Services	781.41	958.47	2,058.92	3,304.85	5,110.80	6,348.82	6,705.70	6,959.95
Sectional Shares of Real GDP (%) *2								
Agriculture, Fishery and Forest	8.4	5.6	4.0	3.3	2.0	1.7	1.6	1.5
Industry	42.8	43.8	38.4	32.8	29.1	27.1	27.0	27.8
Services, etc.	48.8	50.6	57.6	63.9	68.9	71.3	71.4	70.7
Industrial Production Index (2000=100) *2	33.1	44.0	59.9	77.9	100.0	121.8	127.5	137.4
External Trade (Billions of Current USD) *1								
Exports	19.811	30.726	67.214	113.342	151.950	198.432	224.017	246.677
Imports, c.i.f.	19.733	20.102	54.716	104.012	140.732	182.614	202.698	219.252
Balance of Payments (Billions of Current USD) *1								
Trade Balance	0.078	11.151	14.807	13.235	13.672	19.456	24.197	30.445
Current Account	-0.913	9.204	10.923	5.474	8.899	17.578	26.300	32.975
Overall Balance	-0.319	6.525	-3.918	-3.931	2.477	20.056	6.086	-4.020
Foreign Exchange Rate (TWD/USD) *1	36.01	39.85	27.11	27.27	32.99	32.85	32.60	32.44
Purchasing Power Parity (TWD/International Dollar) *2	N.A.	N.A.	N.A.	N.A.	21.5677	N.A.	N.A.	N.A.
Price Indices								
GDP Deflator (2001=100) *2	61.1	73.3	82.5	95.3	99.5	97.0	96.3	96.6
Wholesale Price Index (2006=100) *2	87.8	91.2	83.1	90.2	86.9	94.7	100.0	106.5
Consumer Price Index (2006=100) *2	55.2	66.8	74.5	89.6	96.1	99.4	100.0	101.8
Growth Rate (%) *2								
Real GDP	7.36	5.02	5.70	6.49	5.77	4.16	4.80	5.70
Population	1.87	1.29	1.22	0.84	0.83	0.33	0.44	0.34
Price								
Wholesale Price Index	21.6	-2.6	-0.6	21.9	1.8	0.6	5.6	6.5
Consumer Price Index	19.0	-0.1	4.1	3.7	1.3	2.3	0.6	1.8

Source \*1: "Taiwan Statistics Data Book", Council for Economic Planning and Development (Chinese Taipei)

\*2: Calculated from \*1 by the Coordinating Agency

Note : N.A. means "not available"

: TWD means New Taiwan Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity

## Energy Price of Chinese Taipei in 2007

## Currency Exchange Rate

	Local currency / USD	32.83
<b>Currency Exchange Rate</b>		
<b>Local Currency Unit</b>		NTD

## IMPORT PRICES

## WHOLESALE PRICES

## CONSUMER PRICES

	Unit	Amount		Unit	Amount		Unit	Amount
<b>Coal and Coal Products</b>			<b>Coal and Coal Products</b>			<b>Coal and Coal Products</b>		
Coking Coal	USD/ton	111.63	Coking Coal			Coking Coal		
Anthracite	USD/ton	101.08	Anthracite			Anthracite		
Other bituminous coal	USD/ton	71.80	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal	USD/ton	55.08	Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke	USD/ton	253.47	Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
<b>Oil and Oil Products</b>			Gas Works Gas			Gas Works Gas		
Crude Oil	USD/bbl	66.09	<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Natural Gas Liquids			Crude Oil			Crude Oil		
Ethane			Natural Gas Liquids			Natural Gas Liquids		
LPG	USD/ton	611.56	Ethane			Ethane		
Naphtha	USD/ton	700.05	LPG	NTD/kg	23.81	LPG	NTD/kg	23.81
Motor Gasoline			Naphtha			Naphtha		
Aviation Gasoline			Motor Gasoline	NTD/L	28.32	Motor Gasoline	NTD/L	30.97
Gasoline Type Jet Fuel			Aviation Gasoline			Aviation Gasoline		
Kerosene Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Other Kerosene			Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Gas/Diesel Oil			Other Kerosene	NTD/L	39.00	Other Kerosene	NTD/L	39.00
Fuel Oil	USD/kL	432.19	Gas/Diesel Oil	NTD/L	26.12	Gas/Diesel Oil	NTD/L	27.50
White Spirit SBP			Fuel Oil	NTD/L	14.35	Fuel Oil	NTD/L	14.53
Lubricants			White Spirit SBP			White Spirit SBP		
Bitumen			Lubricants			Lubricants		
Paraffin Waxes			Bitumen			Bitumen		
Petroleum Coke			Paraffin Waxes			Paraffin Waxes		
<b>Natural Gas</b>			Petroleum Coke			Petroleum Coke		
Natural Gas			<b>Natural Gas</b>			<b>Natural Gas</b>		
Liquefied Natural Gas	USD/ton	557.23	Natural Gas	NTD/m <sup>3</sup>	14.31	Natural Gas	NTD/m <sup>3</sup>	14.50
Compressed Natural Gas			Liquefied Natural Gas	NTD/m <sup>3</sup>	15.91	Liquefied Natural Gas		
<b>Electricity</b>			Compressed Natural Gas			Compressed Natural Gas		
Electricity			<b>Electricity</b>			<b>Electricity</b>		
<b>Other Energy Products</b>			Electricity	NTD/kWh	2.15	Industrial	NTD/kWh	1.93
			<b>Other Energy Products</b>			Commercial	NTD/kWh	3.10
						Residential	NTD/kWh	2.10
						Others		
						<b>Other Energy Products</b>		

## 3.19 Thailand

## Energy Balance Table of Thailand in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	5,204	-	11,008	3,061	-	-	-	-	-
<b>2 Import</b>	5,026	4,004	40,217	825	121	-	35	-	165
<b>3 Export</b>	-	-	-2,724	-6,552	-1,176	-	-367	-34	-2,319
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	-	-	3,221	-768	-38	-	12	-69	-142
<b>6 Total Primary Energy Supply</b>	10,230	4,004	51,722	-3,434	-1,094	-	-320	-103	-2,296
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-6,850	-98	-48,197	36,391	6,484	-	4,351	120	18,398
<b>8.1 Main Activity Producer</b>	-6,850	-98	-	-908	-	-	-	-	-21
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-48,197	37,299	6,484	-	4,351	120	18,419
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-285	-83	-181	77	78	-	0	-0	-0
<b>11 Total Final Energy Consumption</b>	3,095	3,824	3,345	33,034	5,468	-	4,031	16	16,102
<b>12 Industry Sector</b>	3,095	3,824	-	3,981	16	-	-	9	976
<b>13 Transport Sector</b>	-	-	-	23,423	5,396	-	4,031	-	11,763
<b>14 Other Sector</b>	-	-	-	5,630	56	-	-	7	3,362
<b>14.1 Residential &amp; Commercial</b>	-	-	-	2,205	-	-	-	7	-
<b>14.2 Agriculture</b>	-	-	-	3,424	56	-	-	-	3,362
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	3,345	-	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

## Energy Balance Table of Thailand in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	4,750	-	10,283	2,453	-	-	-	-	-
<b>2 Import</b>	4,005	3,092	41,773	1,382	-	-	28	-	315
<b>3 Export</b>	-	-	-3,349	-6,836	-1,432	-	-831	-31	-2,534
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	-	-	2,414	-490	34	-	-82	-908	733
<b>6 Total Primary Energy Supply</b>	8,755	3,092	51,122	-3,491	-1,398	-	-885	-939	-1,486
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-4,816	-	-48,094	35,493	6,773	-	4,578	958	17,286
<b>8.1 Main Activity Producer</b>	-4,816	-	-	-1,938	-	-	-	-	-35
<b>8.2 Autoproducers</b>	-	-	-	-8	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-48,094	37,439	6,773	-	4,578	958	17,322
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	769	-231	-227	-166	3	-	-3	1	1
<b>11 Total Final Energy Consumption</b>	4,709	2,861	2,801	31,836	5,378	-	3,690	19	15,801
<b>12 Industry Sector</b>	4,709	2,861	-	3,027	30	-	-	11	777
<b>13 Transport Sector</b>	-	-	-	22,895	5,296	-	3,690	-	11,795
<b>14 Other Sector</b>	-	-	-	5,306	53	-	-	8	3,230
<b>14.1 Residential &amp; Commercial</b>	-	-	-	2,016	-	-	-	8	-
<b>14.2 Agriculture</b>	-	-	-	3,290	53	-	-	-	3,230
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	2,801	608	-	-	-	-	-

Note: Others excludes non-commercial biomass supply and consumption.

Energy Balance Table of Thailand in 2007 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	3,061	-	-	-	14,611	698	-	2	1,480	-	-	36,063
504	-	-	-	-	8,314	-	-	-	-	386	-	58,772
-2,332	-324	-	-	-	-	-	-	-	-	-80	-	-9,356
-	-	-	-	-	-	-	-	-	-	-	-	-
-253	-277	-	-	-	-	-	-	-	-	-	-	2,454
-2,081	2,459	-	-	-	22,925	698	-	2	1,480	307	-	87,933
-	-	-	-	-	-	-	-	-	-	-	-	-
5,214	1,824	-	-	-	-20,428	-698	-	-2	-1,480	12,331	-	-29,031
-888	-	-	-	-	-18,224	-698	-	-2	-	11,078	-	-15,701
-	-	-	-	-	-2,204	-	-	-	-1,480	1,252	-	-2,432
-	-	-	-	-	-	-	-	-	-	-	-	-
6,102	1,824	-	-	-	-	-	-	-	-	-	-	-10,898
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-1,224	-	-1,224
-0	-1	-	-	-	-0	-	-	-	-	-0	-	-472
3,133	4,283	-	-	-	2,497	-	-	-	-	11,413	-	57,206
1,562	1,417	-	-	-	2,296	-	-	-	-	5,220	-	18,416
1,565	667	-	-	-	200	-	-	-	-	12	-	23,636
6	2,199	-	-	-	-	-	-	-	-	6,181	-	11,810
2	2,196	-	-	-	-	-	-	-	-	6,098	-	8,303
4	3	-	-	-	-	-	-	-	-	23	-	3,448
-	-	-	-	-	-	-	-	-	-	60	-	60
-	-	-	-	-	-	-	-	-	-	-	-	3,345

Energy Balance Table of Thailand in 2006 (Continued)

											unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	2,453	-	-	-	14,144	699	-	2	1,207	-	-	33,537
1,040	-	-	-	-	7,952	-	-	-	-	444	-	58,649
-1,336	-672	-	-	-	-	-	-	-	-	-65	-	-10,250
-	-	-	-	-	-	-	-	-	-	-	-	-
-132	-135	-	-	-	-	-	-	-	-	-	-	1,924
-427	1,645	-	-	-	22,097	699	-	2	1,207	379	-	83,861
-	-	-	-	-	-	-	-	-	-	-	-	-
4,049	1,849	-	-	-	-19,946	-699	-	-2	-1,207	11,932	-	-27,338
-1,903	-	-	-	-	-17,784	-699	-	-2	-	10,751	-	-14,488
-8	-	-	-	-	-2,162	-	-	-0	-1,207	1,181	-	-2,195
-	-	-	-	-	-	-	-	-	-	-	-	-
5,959	1,849	-	-	-	-	-	-	-	-	-	-	-10,655
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-1,360	-	-1,360
-1	-168	-	-	-	-0	-	-	-	-	-0	-	145
3,621	3,327	-	-	-	2,151	-	-	-	-	10,951	-	55,308
2,035	175	-	-	-	2,071	-	-	-	-	5,061	-	17,728
1,579	535	-	-	-	80	-	-	-	-	5	-	22,980
7	2,009	-	-	-	-	-	-	-	-	5,886	-	11,192
2	2,006	-	-	-	-	-	-	-	-	5,808	-	7,825
5	3	-	-	-	-	-	-	-	-	21	-	3,310
-	-	-	-	-	-	-	-	-	-	57	-	57
-	608	-	-	-	-	-	-	-	-	-	-	3,409

## Major Energy Indicators of Thailand

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	12,104	15,673	29,940	51,659	63,255	81,581	83,861	87,933
Indigenous Production	531	6,701	11,854	18,485	28,559	34,323	33,537	36,063
Import	12,012	9,393	18,968	33,750	40,086	57,234	58,649	58,772
Export	-16	-442	-791	-1,174	-5,450	-9,024	-10,250	-9,356
Final Energy Consumption	9,272	11,955	22,218	37,561	41,557	55,522	55,308	57,206
Industry	2,759	3,043	5,917	11,944	12,833	17,729	17,728	18,416
Transport	4,278	6,360	11,474	18,761	18,828	23,491	22,980	23,636
Residential & Commercial	991	1,566	2,675	4,735	5,731	7,339	7,825	8,303
Agriculture	1,130	841	1,820	1,574	2,180	3,208	3,310	3,448
Non-energy	114	145	332	548	1,986	3,707	3,409	3,345
<b>Coal, Coal Products</b>								
Primary Energy Supply	445	1,589	3,828	7,064	7,838	10,680	11,847	14,234
Indigenous Production	408	1,401	3,603	5,524	5,196	5,220	4,750	5,204
Import	60	213	220	1,515	2,655	5,461	7,097	9,030
Export	-1	-	-	-	-	-	-	-
Transformation Sector	-331	-1,143	-2,472	-3,406	-4,204	-4,725	-4,816	-6,948
Power Generation	-331	-1,143	-2,472	-3,406	-4,204	-4,725	-4,816	-6,948
Final Energy Consumption	114	446	1,356	3,658	3,660	6,827	7,569	6,918
Industry	114	446	1,356	3,658	3,660	6,827	7,569	6,918
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	7,745	8,134	12,220	24,901	39,400	49,550	51,122	51,722
Indigenous Production	14	1,732	2,112	2,550	5,159	9,893	10,283	11,008
Import	7,866	6,751	10,961	22,840	34,062	41,693	41,773	40,217
Export	-	-403	-767	-715	-514	-3,453	-3,349	-2,724
Transformation Sector	-7,736	-8,050	-11,687	-24,668	-37,774	-46,494	-48,094	-48,197
Petroleum Refineries	-7,736	-8,141	-11,806	-24,871	-38,169	-46,494	-48,094	-48,197
<b>Petroleum Products</b>								
Primary Energy Supply	3,739	2,322	7,700	9,230	-4,361	-3,449	-3,491	-3,434
Import	4,020	2,367	7,731	9,335	1,179	1,980	1,382	825
Export	-14	-37	-21	-452	-4,919	-5,516	-6,836	-6,552
Transformation Sector	4,288	6,221	9,566	18,104	31,530	34,166	35,493	36,391
Power Generation	-2,982	-856	-2,548	-5,611	-2,344	-1,967	-1,946	-908
Petroleum Refineries	7,270	6,645	11,490	22,211	32,193	36,365	37,439	37,299
Final Energy Consumption	8,027	9,587	17,267	26,859	27,303	33,195	31,836	33,034
Industry	2,090	1,619	2,753	4,676	4,335	4,032	3,027	3,981
Transport	4,278	6,360	11,474	18,758	18,822	23,436	22,895	23,423
Residential & Commercial	417	648	927	1,444	1,637	1,880	2,016	2,205
Agriculture	1,128	836	1,811	1,565	2,167	3,187	3,290	3,424
Non-energy	114	124	302	416	342	661	608	-
<b>Natural Gas</b>								
Primary Energy Supply	-	3,250	5,710	9,833	19,620	22,788	22,097	22,925
Indigenous Production	-	3,250	5,710	9,833	17,685	15,068	14,144	14,611
Import	-	-	-	-	1,935	7,720	7,952	8,314
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-2,984	-5,183	-7,567	-14,273	-21,185	-19,946	-20,428
Power Generation	-	-2,388	-4,216	-7,476	-14,106	-21,185	-19,946	-20,428
Final Energy Consumption	-	178	267	787	1,389	2,067	2,151	2,497
Industry	-	178	266	784	1,386	2,017	2,071	2,296
Transport	-	-	-	3	2	50	80	200
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	1,241	1,984	3,799	6,885	8,254	11,369	11,932	12,331
Thermal	1,131	1,667	3,371	6,308	7,736	10,870	11,233	11,633
Hydro	109	318	428	577	518	499	699	698
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	1,131	1,723	3,297	6,125	7,562	10,387	10,951	11,413
Industry	555	800	1,542	2,826	3,452	4,853	5,061	5,220
Transport	-	-	-	-	3	5	5	12
Residential & Commercial	574	918	1,747	3,291	4,094	5,459	5,808	6,098
Agriculture	2	5	8	9	13	21	21	23

Note: Total excludes non-commercial biomass supply and consumption.

## Major Economic Indicators of Thailand

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	47.26	52.54	56.67	60.14	62.35	65.95	66.51	66.98
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	37.27	48.60	79.36	120.01	122.73	157.38	165.61	173.77
Real Term (Billions of 2000 Price and 2000 PPP)	88.77	115.73	189.00	285.79	292.27	374.81	394.40	413.83
Nominal (Billions of Current USD)	32.35	38.90	85.34	168.02	122.73	167.80	198.63	236.61
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	789	925	1,400	1,995	1,968	2,387	2,490	2,594
Real Term (2000 Price and 2000 PPP)	1,878	2,203	3,335	4,752	4,688	5,684	5,930	6,178
Nominal (Current USD)	685	740	1,506	2,794	1,968	2,544	2,987	3,533
Nominal GDP & its Components (Billions of Current THB) *1								
Gross Domestic Product	662.48	1,056.50	2,183.54	4,186.21	4,922.73	6,748.88	7,524.49	8,167.52
Household Final Consumption Expenditure, etc.	433.58	657.37	1,234.98	2,225.74	2,762.92	4,053.38	4,375.48	4,540.08
General Government Final Consumption Expenditure	81.43	142.92	205.35	414.40	557.81	840.84	924.61	1,070.14
Gross Fixed Capital Formation	183.99	287.00	881.76	1,719.12	1,081.42	2,048.02	2,208.04	2,270.04
Stock Change	9.07	11.40	21.21	43.04	42.74	180.34	27.00	3.81
Exports of Goods and Services	159.73	245.25	745.29	1,751.67	3,287.28	5,211.23	5,751.59	6,210.21
Imports of Goods and Services	201.18	274.07	909.46	2,033.89	2,862.30	5,301.86	5,477.80	5,563.14
Real GDP & its Components (Billions of 1988 THB) *1								
Gross Domestic Product	913.73	1,191.25	1,945.37	2,941.74	3,008.40	3,858.02	4,059.65	4,259.63
Household Final Consumption Expenditure, etc.	607.23	723.20	1,110.93	1,601.69	1,623.72	2,106.87	2,173.24	2,204.86
General Government Final Consumption Expenditure	106.94	151.25	171.94	232.46	277.13	343.36	351.12	388.88
Gross Fixed Capital Formation	269.63	333.64	759.87	1,236.09	597.44	903.25	937.16	949.89
Stock Change	6.45	12.23	20.65	42.89	25.64	76.60	11.61	1.78
Exports of Goods and Services	195.23	288.02	709.65	1,386.11	1,947.08	2,546.28	2,762.95	2,958.23
Imports of Goods and Services	271.20	290.57	806.98	1,543.60	1,497.67	2,150.94	2,207.65	2,285.44
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	19.9	19.1	13.6	9.4	10.3	9.0	8.9	8.8
Industry	30.1	31.6	37.8	43.0	44.4	47.0	47.1	47.3
Services, etc.	50.0	49.4	48.6	47.6	45.3	44.0	44.0	43.8
Industrial Production Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	6.505	7.121	23.068	56.439	69.057	110.936	129.722	152.098
Imports, c.i.f.	9.214	9.242	33.045	70.786	61.924	118.178	128.773	139.966
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-1.902	-1.332	-6.751	-7.968	11.701	3.388	13.844	25.547
Current Account	-2.076	-1.537	-7.281	-13.582	9.313	-7.647	2.316	14.040
Overall Balance	-0.206	0.105	3.235	7.159	-1.806	5.417	12.669	17.077
Foreign Exchange Rate (THB/USD) *1	20.4764	27.1589	25.5855	24.9152	40.1118	40.2201	37.8820	34.5182
Purchasing Power Parity (THB/International Dollar) *1	13.8212	13.1041	14.1578	15.9055	16.8431	15.9321	16.3651	16.4916
Price Indices								
GDP Deflator (1988=100) *3	72.5	88.7	112.2	142.3	163.6	174.9	185.3	191.7
Wholesale Price Index (2000=100) *2	41.2	45.0	55.6	66.7	79.2	100.0	107.1	110.5
Consumer Price Index (2000=100) *2	37.4	47.6	57.5	72.7	89.4	100.0	104.6	107.0
Growth Rate (%) *3								
Real GDP	5.17	4.65	11.17	9.24	4.75	4.60	5.23	4.93
Population	2.24	1.92	1.37	0.97	0.85	1.02	0.85	0.71
Price								
Wholesale Price Index	20.1	0.0	3.5	8.2	3.9	9.1	7.1	3.2
Consumer Price Index	19.7	2.4	5.9	5.8	1.6	4.5	4.6	2.2

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : THB means Baht, USD means United States Dollar  
                  : PPP means Purchasing Power Parity

## Energy Price of Thailand in 2007

## Currency Exchange Rate

	Local currency / US Dollar	34.68?
<b>Currency Exchange Rate</b>		
<b>Local Currency Unit</b>		?

## IMPORT PRICES

## WHOLESALE PRICES

## CONSUMER PRICES

	Unit	Amount		Unit	Amount		Unit	Amount
<b>Coal and Coal Products</b>			<b>Coal and Coal Products</b>			<b>Coal and Coal Products</b>		
Coking Coal			Coking Coal			Coking Coal		
Anthracite			Anthracite			Anthracite		
Other bituminous coal			Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite	?/ton	500.00	Lignite	?/ton	513.80
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke			Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
<b>Oil and Oil Products</b>			<b>Gas Works Gas</b>			<b>Gas Works Gas</b>		
Crude Oil			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Natural Gas Liquids			Crude Oil			Crude Oil		
Ethane			Natural Gas Liquids			Natural Gas Liquids		
LPG	? / kg	11.18	Ethane			Ethane		
Naphtha			LPG	? / kg	12.46	LPG	? / kg	16.91
Motor Gasoline	? / litre	18.21	Naphtha			Naphtha		
Aviation Gasoline			Motor Gasoline	? / litre	28.02	Motor Gasoline (ULG 95)	? / litre	29.18
Gasoline Type Jet Fuel			Aviation Gasoline			Aviation Gasoline		
Kerosene Type Jet Fuel	? / litre		Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Other Kerosene		18.51	Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Gas/Diesel Oil	? / litre	18.88	Other Kerosene	? / litre	24.04	Other Kerosene	? / litre	28.94
Fuel Oil	? / litre	13.04	Gas/Diesel Oil	? / litre	24.76	Gas/Diesel Oil (HSD)	? / litre	25.66
White Spirit SBP			Fuel Oil	? / litre	14.89	Fuel Oil (1500)	? / litre	18.45
Lubricants			White Spirit SBP			White Spirit SBP		
Bitumen			Lubricants			Lubricants		
Paraffin Waxes			Bitumen			Bitumen		
Petroleum Coke			Paraffin Waxes			Paraffin Waxes		
<b>Natural Gas</b>			<b>Petroleum Coke</b>			<b>Petroleum Coke</b>		
Natural Gas			<b>Natural Gas</b>			<b>Natural Gas</b>		
Liquefied Natural Gas			Natural Gas			Natural Gas	?/kg	8.50
Compressed Natural Gas			Liquefied Natural Gas			Liquefied Natural Gas		
<b>Electricity</b>			Compressed Natural Gas			Compressed Natural Gas		
Electricity			<b>Electricity</b>			<b>Electricity*</b>		
<b>Other Energy Products</b>			Electricity			Industrial		
			<b>Other Energy Products</b>			Commercial		
						Residential		
						Others		
						<b>Other Energy Products</b>		



## 3.20 United States of America

Energy Balance Table of United States of America in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	567,794	-	317,626	-	-	-	-	-	-
<b>2 Import</b>	20,430	1,464	597,862	108,061	48,346	4,277	8,713	161	11,423
<b>3 Export</b>	-33,341	-859	-5,838	-65,724	-6,795	-	-2,053	-426	-13,563
<b>4 International Marine Bunkers</b>	-	-	-	-30,223	-	-	-	-	-7,015
<b>5 Stock Changes</b>	-1,368	31	1,381	3,596	-1,009	-35	242	76	1,623
<b>6 Total Primary Energy Supply</b>	553,516	636	911,032	15,710	40,542	4,241	6,902	-188	-7,531
<b>7 Transfers</b>	-	-	-46,673	47,529	-3,193	-	-	-	-
<b>8 Total Transformation Sector</b>	-521,249	7,754	-853,936	868,020	391,880	9,428	73,783	1,773	211,663
<b>8.1 Main Activity Producer</b>	-419,844	-81,306	-	-15,487	-	-	-148	-74	-2,091
<b>8.2 Autoproducers</b>	-2,566	-1,070	-	-743	-	-	-	-15	-74
<b>8.3 Gas Processing</b>	-1,843	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-867,305	884,249	391,880	9,428	73,932	1,862	213,829
<b>8.5 Coal Transformation</b>	-96,996	90,129	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	13,369	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-238	-1,884	-	-52,509	-27	-	-29	-	-112
<b>10. Discrepancy</b>	-8,570	-2,240	-10,422	-2,881	-870	-	-1	-	-1,737
<b>11 Total Final Energy Consumption</b>	23,458	4,267	-	875,868	428,333	13,669	80,655	1,585	202,283
<b>12 Industry Sector</b>	21,725	4,267	-	31,128	4,149	-	-	217	20,091
<b>13 Transport Sector</b>	-	-	-	645,685	419,455	-	80,655	-	145,053
<b>14 Other Sector</b>	1,734	-	-	55,600	4,730	-	-	1,368	37,139
<b>14.1 Residential &amp; Commercial</b>	1,686	-	-	39,678	1,479	-	-	1,336	25,610
<b>14.2 Agriculture</b>	48	-	-	15,922	3,251	-	-	32	11,529
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	143,455	-	13,669	-	-	-

Energy Balance Table of United States of America in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	576,759	-	317,812	-	-	-	-	-	-
<b>2 Import</b>	20,404	2,421	604,719	112,646	48,192	6,015	7,415	230	13,571
<b>3 Export</b>	-28,095	-962	-5,605	-59,619	-6,884	-	-2,017	-153	-11,313
<b>4 International Marine Bunkers</b>	-	-	-	-27,796	-	-	-	-	-7,157
<b>5 Stock Changes</b>	-20,710	-42	1,015	-6,051	-465	-9	-17	200	-1,652
<b>6 Total Primary Energy Supply</b>	548,358	1,417	917,941	19,181	40,843	6,006	5,382	277	-6,552
<b>7 Transfers</b>	-	-	-47,672	48,480	-3,345	-	-	-	-
<b>8 Total Transformation Sector</b>	-512,922	6,122	-856,873	866,440	390,993	9,206	75,421	2,382	206,863
<b>8.1 Main Activity Producer</b>	-431,426	-60,210	-	-15,191	-	-	-76	-55	-1,739
<b>8.2 Autoproducers</b>	-3,377	-982	-	-752	-	-	-1	-	-85
<b>8.3 Gas Processing</b>	-2,001	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-867,235	882,383	390,993	9,206	75,497	2,438	208,687
<b>8.5 Coal Transformation</b>	-76,118	67,315	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	10,363	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-181	-1,967	-	-53,384	-4	-	-	-	-88
<b>10. Discrepancy</b>	-11,148	-1,662	-13,396	-250	-828	1	0	-1	-606
<b>11 Total Final Energy Consumption</b>	24,108	3,910	-	880,466	427,659	15,213	80,802	2,658	199,617
<b>12 Industry Sector</b>	22,568	3,910	-	35,493	5,356	-	-	617	20,012
<b>13 Transport Sector</b>	-	-	-	640,935	417,363	-	80,802	-	142,278
<b>14 Other Sector</b>	1,540	-	-	56,716	4,940	-	-	2,041	37,327
<b>14.1 Residential &amp; Commercial</b>	1,518	-	-	39,297	1,179	-	-	1,992	24,811
<b>14.2 Agriculture</b>	22	-	-	17,419	3,761	-	-	49	12,516
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	147,322	-	15,213	-	-	-

Energy Balance Table of United States of America in 2007 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	445,785	23,697	218,027	19,990	81,004	-	-	1,673,923	
21,842	1,090	-	8	12,201	107,228	-	-	-	841	4,420	-	840,306	
-18,701	-	-	-	-24,186	-18,873	-	-	-	-	-1,732	-	-126,367	
-23,208	-	-	-	-	-	-	-	-	-	-	-	-30,223	
751	250	-	296	1,402	4,451	-	-	-	-143	-	-	7,948	
-19,316	1,340	-	304	-10,583	538,591	23,697	218,027	19,990	81,703	2,688	-	2,365,588	
-	26,333	-	18,133	6,256	-	-	-	-	-	-	-	856	
28,571	21,670	40,390	513	88,347	-171,969	-23,697	-218,027	-17,629	-33,383	374,002	13,177	-576,938	
-9,095	-	-	-	-4,079	-159,405	-23,549	-218,027	-17,629	-13,052	360,405	13,177	-574,717	
-253	-	-	-	-400	-13,756	-148	-	-	-6,101	13,597	-	-10,787	
-	-	-	-	-	1,193	-	-	-	-	-	-	-650	
37,920	21,670	40,390	513	92,825	-	-	-	-	-	-	-	16,944	
-	-	-	-	-	-	-	-	-	-	-	-	-6,866	
-	-	-	-	-	-	-	-	-	-14,230	-	-	-861	
-342	-513	-39,253	-5	-12,229	-43,564	-	-	-	-	-47,755	-5,977	-151,926	
-258	1	-1	-	-15	-2,109	-	-	-	-2	-1	0	-26,225	
8,655	48,831	1,136	18,946	71,775	320,949	-	-	2,360	48,318	328,934	7,200	1,611,354	
6,162	510	-	-	-	111,169	-	-	118	35,554	79,879	5,689	289,529	
88	434	-	-	-	15,120	-	-	-	-	703	-	661,509	
2,404	9,959	-	-	-	179,714	-	-	2,242	12,764	248,352	1,511	501,916	
2,404	8,849	-	-	-	179,714	-	-	2,242	12,395	234,656	1,511	471,882	
-	1,109	-	-	-	-	-	-	-	369	-	-	16,339	
-	-	-	-	-	-	-	-	-	-	13,696	-	13,696	
-	37,929	1,136	18,946	71,775	14,945	-	-	-	-	-	-	158,400	

Energy Balance Table of United States of America in 2006 (Continued)

												unit: ktoe	
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12	
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total	
-	-	-	-	-	431,698	27,321	212,700	18,929	76,970	-	-	1,662,190	
21,713	1,259	-	9	14,242	97,231	-	-	-	1,400	3,671	-	842,493	
-15,551	-	-	-	-23,702	-16,581	-	-	-	-	-2,087	-	-112,949	
-20,639	-	-	-	-	-	-	-	-	-	-	-	-27,796	
-2,085	-769	-	379	-1,632	-10,133	-	-	-	-257	-	-	-36,178	
-16,561	489	-	388	-11,092	502,216	27,321	212,700	18,929	78,113	1,584	-	2,327,761	
-	28,092	-	17,249	6,484	-	-	-	-	-	-	-	809	
27,595	20,899	40,946	474	91,661	-157,104	-27,321	-212,700	-16,725	-30,038	369,809	12,940	-558,373	
-8,278	-	-	-	-5,043	-145,009	-27,060	-212,700	-16,725	-12,860	355,840	12,940	-552,403	
-293	-	-	-	-373	-13,362	-261	-	-	-6,149	13,970	-	-10,913	
-	-	-	-	-	1,267	-	-	-	-	-	-	-734	
36,165	20,899	40,946	474	97,077	-	-	-	-	-	-	-	15,147	
-	-	-	-	-	-	-	-	-	-	-	-	-8,803	
-	-	-	-	-	-	-	-	-	-11,030	-	-	-668	
-392	-541	-39,476	-11	-12,873	-42,891	-	-	-	-	-51,280	-3,270	-152,973	
1,253	-	-0	-	-69	2,107	-	-	-	-10	0	-6,880	-31,239	
11,895	48,939	1,471	18,101	74,110	304,328	-	-	2,203	48,065	320,114	2,790	1,585,985	
8,995	514	-	-	-	108,492	-	-	111	36,276	78,837	2,205	287,891	
71	420	-	-	-	14,175	-	-	-	-	633	-	655,742	
2,830	9,578	-	-	-	167,077	-	-	2,092	11,789	240,644	586	480,444	
2,830	8,485	-	-	-	167,077	-	-	2,092	11,497	228,009	586	450,076	
-	1,092	-	-	-	-	-	-	-	292	-	-	17,733	
-	-	-	-	-	-	-	-	-	-	12,636	-	12,636	
-	38,427	1,471	18,101	74,110	14,585	-	-	-	-	-	-	161,906	

## Major Energy Indicators of United States of America

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	1,748,648	1,695,539	1,927,774	2,088,962	2,305,188	2,349,929	2,327,761	2,365,588
Indigenous Production	1,481,448	1,488,872	1,650,895	1,663,148	1,677,735	1,638,867	1,662,190	1,673,923
Import	376,915	281,249	452,467	535,961	701,710	841,681	842,493	840,306
Export	-88,326	-100,219	-109,528	-100,498	-94,004	-105,449	-112,949	-126,367
Final Energy Consumption	1,434,285	1,344,865	1,304,173	1,391,684	1,564,336	1,595,071	1,585,985	1,611,354
Industry	594,201	510,870	281,347	269,437	328,856	282,151	287,891	289,529
Transport	470,315	479,219	500,660	544,853	609,651	651,279	655,742	661,509
Residential & Commercial	356,887	352,692	369,147	421,033	457,195	472,080	450,076	471,882
Agriculture	-	-	14,404	15,203	14,104	16,785	17,733	16,339
Non-energy	-	-	119,048	140,752	153,034	159,875	161,906	158,400
<b>Coal, Coal Products</b>								
Primary Energy Supply	371,742	420,402	458,370	478,067	543,593	557,551	549,775	554,151
Indigenous Production	445,217	462,644	539,215	531,553	544,849	564,171	576,759	567,794
Import	1,105	1,512	2,075	5,222	9,647	19,285	22,825	21,894
Export	-59,177	-59,036	-66,909	-54,748	-36,634	-29,033	-29,057	-34,200
Transformation Sector	-305,433	-357,410	-406,675	-455,267	-517,575	-511,908	-506,799	-513,495
Power Generation	-290,071	-348,402	-391,382	-437,944	-501,855	-503,875	-495,996	-504,786
Final Energy Consumption	113,084	87,668	53,147	26,984	29,186	28,360	28,018	27,725
Industry	100,038	83,451	43,600	24,184	26,918	25,852	26,478	25,991
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	3,482	4,217	3,855	2,800	2,267	2,084	1,518	1,686
Agriculture	-	-	-	-	-	424	22	48
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	741,462	660,377	783,558	819,685	887,075	911,635	917,941	911,032
Indigenous Production	490,831	508,322	432,557	397,864	365,614	322,552	317,812	317,626
Import	268,423	165,089	351,041	419,079	524,271	599,509	604,719	597,862
Export	-14,570	-10,415	-2,100	-2,274	-6,151	-4,911	-5,605	-5,838
Transformation Sector	-701,883	-654,690	-755,276	-778,915	-838,470	-853,335	-856,873	-853,936
Petroleum Refineries	-701,883	-654,690	-755,276	-781,403	-841,457	-860,820	-867,235	-867,305
<b>Petroleum Products</b>								
Primary Energy Supply	66,318	66,982	-13,608	-18,607	3,367	40,581	19,181	15,710
Import	82,411	89,121	62,245	41,816	75,822	117,922	112,646	108,061
Export	-13,107	-29,075	-36,778	-39,156	-44,382	-53,108	-59,619	-65,724
Transformation Sector	652,021	639,590	726,572	768,172	819,584	844,679	866,440	868,020
Power Generation	-62,925	-25,939	-27,246	-15,132	-29,565	-30,043	-15,943	-16,229
Petroleum Refineries	714,946	665,529	753,818	783,304	849,149	874,722	882,383	884,249
Final Energy Consumption	759,089	715,868	696,382	741,966	818,020	878,761	880,466	875,868
Industry	228,529	186,609	44,253	26,763	25,660	35,150	35,493	31,128
Transport	455,308	467,112	484,891	528,131	594,089	636,469	640,935	645,685
Residential & Commercial	72,669	60,386	47,676	45,286	48,562	45,480	39,297	39,678
Agriculture	-	-	14,404	15,203	14,104	16,172	17,419	15,922
Non-energy	-	-	105,158	126,582	135,605	145,491	147,322	143,455
<b>Natural Gas</b>								
Primary Energy Supply	473,432	411,471	438,370	507,382	547,851	507,155	502,216	538,591
Indigenous Production	451,504	385,115	418,210	434,578	446,947	421,558	431,698	445,785
Import	22,826	21,583	35,170	65,790	87,781	100,874	97,231	107,228
Export	-1,120	-1,267	-1,976	-3,534	-5,574	-16,694	-16,581	-18,873
Transformation Sector	-86,421	-71,663	-88,608	-127,375	-135,773	-153,459	-157,104	-171,969
Power Generation	-86,421	-71,663	-89,762	-128,613	-136,917	-154,656	-158,371	-173,162
Final Energy Consumption	376,869	333,225	303,077	326,450	359,988	317,072	304,328	320,949
Industry	190,395	160,580	109,917	112,129	137,920	107,001	108,492	111,169
Transport	14,739	11,780	15,414	16,391	15,182	14,164	14,175	15,120
Residential & Commercial	171,000	160,543	163,855	183,759	189,458	181,522	167,077	179,714
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	13,890	14,170	17,429	14,384	14,585	14,945
<b>Electricity</b>								
Power Generation	196,478	212,238	276,801	308,062	348,514	369,272	369,809	374,002
Thermal	107,327	88,101	92,571	92,988	116,550	132,375	129,788	132,278
Hydro	23,719	24,160	24,851	29,056	24,079	25,622	27,321	23,697
Nuclear	65,433	99,978	159,380	186,018	207,885	211,275	212,700	218,027
Final Energy Consumption	180,358	200,093	226,487	261,610	300,939	319,547	320,114	328,934
Industry	70,353	72,219	74,523	89,559	98,222	79,449	78,837	79,879
Transport	268	327	355	331	380	646	633	703
Residential & Commercial	109,736	127,546	151,610	171,720	202,337	226,550	228,009	234,656
Agriculture	-	-	-	-	-	-	-	-

## Major Economic Indicators of United States of America

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	227.23	237.92	249.62	266.28	282.17	295.56	298.36	301.29
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	5,128.00	6,011.00	7,055.00	7,972.80	9,764.80	10,950.60	11,265.20	11,490.50
Real Term (Billions of 2000 Price and 2000 PPP)	5,128.00	6,011.00	7,055.00	7,972.80	9,764.80	10,950.60	11,265.20	11,490.50
Nominal (Billions of Current USD)	2,768.90	4,187.50	5,757.20	7,342.30	9,764.80	12,376.10	13,132.90	13,751.40
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	22,568	25,264	28,263	29,942	34,606	37,050	37,757	38,138
Real Term (2000 Price and 2000 PPP)	22,568	25,264	28,263	29,942	34,606	37,050	37,757	38,138
Nominal (Current USD)	12,186	17,600	23,064	27,574	34,606	41,873	44,017	45,642
Nominal GDP & its Components (Billions of Current USD) *1								
Gross Domestic Product	2,768.90	4,187.50	5,757.20	7,342.30	9,764.80	12,376.10	13,132.90	13,751.40
Household Final Consumption Expenditure, etc.	1,757.10	2,720.30	3,839.90	4,975.80	6,739.40	8,707.80	9,224.50	N.A.
General Government Final Consumption Expenditure	463.80	733.10	978.80	1,125.30	1,404.10	1,968.60	2,095.50	N.A.
Gross Fixed Capital Formation	565.20	824.10	1,003.40	1,301.60	1,944.20	2,377.50	2,528.20	N.A.
Stock Change	-4.30	25.30	13.10	30.90	56.50	36.80	46.70	N.A.
Exports of Goods and Services	280.80	302.00	552.40	812.20	1,096.30	1,309.40	1,467.60	N.A.
Imports of Goods and Services	293.80	417.20	630.30	903.60	1,475.80	2,023.90	2,229.60	N.A.
Real GDP & its Components (Billions of 2000 USD) *1								
Gross Domestic Product	5,128.00	6,011.00	7,055.00	7,972.80	9,764.80	10,950.60	11,265.20	11,490.50
Household Final Consumption Expenditure, etc.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
General Government Final Consumption Expenditure	957.10	1,128.10	1,293.80	1,288.90	1,404.10	1,602.30	1,628.20	N.A.
Gross Fixed Capital Formation	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	323.50	328.30	552.50	778.20	1,096.30	1,203.40	1,304.10	N.A.
Imports of Goods and Services	310.90	469.80	607.10	849.10	1,475.80	1,821.50	1,928.60	N.A.
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	1.0	1.2	1.0	0.9	1.1	1.2	1.1	N.A.
Industry	25.4	23.9	22.9	22.7	22.5	20.8	20.5	N.A.
Services, etc.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Industrial Production Index (2000=100) *2	52.5	57.2	64.8	75.0	96.7	100.0	102.3	103.8
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	225.566	218.815	393.592	584.743	781.918	904.289	1,036.635	1,162.479
Imports, c.i.f.	256.984	352.463	516.987	770.852	1,259.300	1,732.706	1,918.077	2,020.403
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-25.533	-122.165	-110.262	-172.330	-452.061	-787.056	-843.544	-826.914
Current Account	2.127	-124.455	-78.952	-113.561	-417.425	-748.688	-803.548	-726.571
Overall Balance	6.990	3.835	2.233	9.747	0.295	-14.100	-2.392	0.125
Foreign Exchange Rate (USD/USD) *1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Purchasing Power Parity (USD/International Dollar) *1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Price Indices								
GDP Deflator (2000=100) *3	54.0	69.7	81.6	92.1	100.0	113.0	116.6	119.7
Wholesale Price Index (2005=100) *2	57.1	65.5	73.9	79.3	84.3	100.0	104.7	109.7
Consumer Price Index (2005=100) *2	54.9	64.7	72.2	78.3	84.1	100.0	105.4	109.3
Growth Rate (%) *3								
Real GDP	-0.24	4.10	1.86	2.54	3.69	3.08	2.87	2.00
Population	0.96	0.89	1.14	1.20	1.12	0.91	0.95	0.98
Price								
Wholesale Price Index	14.1	-0.5	3.6	3.6	5.8	7.3	4.7	4.8
Consumer Price Index	16.2	0.4	3.7	4.0	6.5	8.6	5.4	3.8

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.21 Viet Nam

## Energy Balance Table of Viet Nam in 2007

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	24,186	-	16,207	670	-	-	-	-	-
<b>2 Import</b>	375	64	-	14,834	3,461	0	518	259	6,578
<b>3 Export</b>	-17,854	-	-15,333	-969	-174	-	-66	-32	-347
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	2,910	-	-874	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	9,617	64	-0	14,534	3,287	0	452	227	6,231
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-3,592	-	-	-821	-	-	-	-	-206
<b>8.1 Main Activity Producer</b>	-3,208	-	-	-388	-	-	-	-	-182
<b>8.2 Autoproducers</b>	-383	-	-	-433	-	-	-	-	-25
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-	-	-	-	-	-	-
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	-0	-	0	-0	0	-	-	0	-
<b>11 Total Final Energy Consumption</b>	6,025	64	-	13,713	3,287	0	452	227	6,025
<b>12 Industry Sector</b>	4,668	64	-	2,158	-	-	-	13	1,132
<b>13 Transport Sector</b>	-	-	-	8,078	3,166	-	452	-	4,116
<b>14 Other Sector</b>	1,357	-	-	2,065	121	-	-	214	777
<b>14.1 Residential &amp; Commercial</b>	1,336	-	-	1,559	-	-	-	214	407
<b>14.2 Agriculture</b>	21	-	-	506	121	-	-	-	370
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	1,412	-	0	-	-	-

Note: Above Energy Balance Table were estimated by C.A.

Others excludes non-commercial biomass supply and consumption.

## Energy Balance Table of Viet Nam in 2006

	1	2	3	4	4.1	4.2	4.3	4.4	4.5
	Coal	Coal Products	Crude Oil & NGL	Petroleum Products	Mogas	Naphtha	Jet Fuel	Kerosene	Diesel Oil
<b>1 Indigenous Production</b>	21,790	-	17,510	607	-	-	-	-	-
<b>2 Import</b>	64	-	-	12,170	2,992	-	473	236	5,748
<b>3 Export</b>	-11,936	-	-17,510	-	-	-	-	-	-
<b>4 International Marine Bunkers</b>	-	-	-	-	-	-	-	-	-
<b>5 Stock Changes</b>	-872	-	-	-	-	-	-	-	-
<b>6 Total Primary Energy Supply</b>	9,045	-	-	12,777	2,992	-	473	236	5,748
<b>7 Transfers</b>	-	-	-	-	-	-	-	-	-
<b>8 Total Transformation Sector</b>	-3,517	-	-	-483	-	-	-	-	-85
<b>8.1 Main Activity Producer</b>	-3,517	-	-	-483	-	-	-	-	-85
<b>8.2 Autoproducers</b>	-	-	-	-	-	-	-	-	-
<b>8.3 Gas Processing</b>	-	-	-	-	-	-	-	-	-
<b>8.4 Petroleum Refineries</b>	-	-	-	-	-	-	-	-	-
<b>8.5 Coal Transformation</b>	-	-	-	-	-	-	-	-	-
<b>8.6 Other Transformation</b>	-	-	-	-	-	-	-	-	-
<b>9. Loss &amp; Own Use</b>	-	-	-	-	-	-	-	-	-
<b>10. Discrepancy</b>	0	-	-	0	-	-	-	-0	-0
<b>11 Total Final Energy Consumption</b>	5,528	-	-	12,294	2,992	-	473	236	5,663
<b>12 Industry Sector</b>	4,176	-	-	2,235	-	-	-	10	1,066
<b>13 Transport Sector</b>	-	-	-	7,560	2,864	-	473	-	3,831
<b>14 Other Sector</b>	1,352	-	-	2,106	128	-	-	227	766
<b>14.1 Residential &amp; Commercial</b>	1,331	-	-	1,596	-	-	-	227	401
<b>14.2 Agriculture</b>	22	-	-	511	128	-	-	-	365
<b>14.3 Other</b>	-	-	-	-	-	-	-	-	-
<b>15 Non-energy</b>	-	-	-	393	-	-	-	-	-

Note: Above Energy Balance Table were estimated by C.A.

Others excludes non-commercial biomass supply and consumption.



Energy Balance Table of Viet Nam in 2007 (Continued)

												unit: ktoe
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	306	-	-	364	6,139	1,968	-	-	-	-	-	49,170
2,299	670	-	-	1,048	-	-	-	-	-	226	-	15,499
-350	-	-	-	-	-486	-	-	-	-	-	-	-34,642
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	2,036
1,949	976	-	-	1,412	5,653	1,968	-	-	-	226	-	32,062
-	-	-	-	-	-	-	-	-	-	-	-	-
-615	-	-	-	-	-4,916	-1,968	-	-	-	5,750	-	-5,547
-206	-	-	-	-	-4,713	-1,968	-	-	-	5,396	-	-4,882
-409	-	-	-	-	-203	-	-	-	-	354	-	-666
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-195	-	-	-	-	-720	-	-915
-0	-	-	-	-0	-	-	-	-	-	0	-	-0
1,334	976	-	-	1,412	542	-	-	-	-	5,256	-	25,600
861	152	-	-	-	542	-	-	-	-	2,765	-	10,197
344	-	-	-	-	-	-	-	-	-	37	-	8,115
129	823	-	-	-	-	-	-	-	-	2,454	-	5,876
115	823	-	-	-	-	-	-	-	-	2,405	-	5,301
14	-	-	-	-	-	-	-	-	-	49	-	576
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	1,412	-	-	-	-	-	-	-	1,412

Energy Balance Table of Viet Nam in 2006 (Continued)

												unit: ktoe
4.6	4.7	4.8	4.9	4.10	5	6	7	8	9	10	11	12
Fuel Oil	LPG	Refinery Gas	Ethane	Other Petroleum Products	Gas	Hydro	Nuclear	Geothermal Solar etc.	Others	Electricity	Heat	Total
-	329	-	-	278	6,638	1,755	-	-	-	-	-	48,300
1,995	612	-	-	114	-	-	-	-	-	83	-	12,317
-	-	-	-	-	-1,530	-	-	-	-	-	-	-30,976
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-872
1,995	941	-	-	393	5,108	1,755	-	-	-	83	-	28,769
-	-	-	-	-	-	-	-	-	-	-	-	-
-398	-	-	-	-	-4,872	-1,755	-	-	-	5,285	-	-5,342
-398	-	-	-	-	-4,872	-1,755	-	-	-	5,285	-	-5,342
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-655	-	-655
0	0	-	-	0	90	-	-	-	-	-83	-	7
1,597	941	-	-	393	326	-	-	-	-	4,630	-	22,779
1,038	122	-	-	-	326	-	-	-	-	2,312	-	9,049
392	-	-	-	-	-	-	-	-	-	-	-	7,560
167	818	-	-	-	-	-	-	-	-	2,318	-	5,777
150	818	-	-	-	-	-	-	-	-	2,270	-	5,196
17	-	-	-	-	-	-	-	-	-	49	-	581
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	393	-	-	-	-	-	-	-	393

## Major Energy Indicators of Viet Nam

ktoe

	1980	1985	1990	1995	2000	2005	2006	2007
<b>Total</b>								
Primary Energy Supply	-	-	5,414	9,123	14,841	25,769	28,769	32,062
Indigenous Production	-	-	5,811	13,562	25,777	45,190	48,300	49,170
Import	-	-	2,947	5,101	8,885	12,331	12,317	15,499
Export	-	-	-3,125	-9,816	-18,650	-30,064	-30,976	-34,642
Final Energy Consumption	-	-	4,212	7,932	11,927	20,905	22,779	25,600
Industry	-	-	1,713	3,099	4,653	8,235	9,049	10,197
Transport	-	-	1,412	2,525	3,763	6,898	7,560	8,115
Residential & Commercial	-	-	815	1,688	2,973	4,926	5,196	5,301
Agriculture	-	-	244	366	400	545	581	576
Non-energy	-	-	28	255	137	301	393	1,412
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	-	2,212	3,314	4,372	7,082	9,045	9,681
Indigenous Production	-	-	2,597	4,676	6,501	18,142	21,790	24,186
Import	-	-	-	-	-	57	64	439
Export	-	-	-442	-1,580	-1,821	-10,072	-11,936	-17,854
Transformation Sector	-	-	-888	-710	-1,150	-2,132	-3,517	-3,592
Power Generation	-	-	-888	-710	-1,150	-2,132	-3,517	-3,592
Final Energy Consumption	-	-	1,324	2,603	3,223	4,950	5,528	6,089
Industry	-	-	1,019	1,938	2,339	3,734	4,176	4,732
Transport	-	-	14	2	-	-	-	-
Residential & Commercial	-	-	226	589	860	1,194	1,331	1,336
Agriculture	-	-	64	76	24	22	22	21
Non-energy	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	-	-	-0	-	20	0	-	-0
Indigenous Production	-	-	2,750	7,790	16,584	18,935	17,510	16,207
Import	-	-	-	-	-	-	-	-
Export	-	-	-2,664	-7,790	-15,701	-18,290	-17,510	-15,333
Transformation Sector	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-	-	-	-	-	-
<b>Petroleum Products</b>								
Primary Energy Supply	-	-	2,737	4,713	7,757	12,533	12,777	14,534
Import	-	-	2,947	5,101	8,885	12,274	12,170	14,834
Export	-	-	-19	-446	-1,128	-415	-	-969
Transformation Sector	-	-	-381	-369	-997	-678	-483	-821
Power Generation	-	-	-381	-369	-1,310	-678	-483	-821
Petroleum Refineries	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	2,356	4,344	6,759	11,855	12,294	13,713
Industry	-	-	449	743	1,515	2,499	2,235	2,158
Transport	-	-	1,393	2,514	3,742	6,898	7,560	8,078
Residential & Commercial	-	-	340	583	1,026	1,685	1,596	1,559
Agriculture	-	-	146	249	339	473	511	506
Non-energy	-	-	28	255	137	301	393	1,412
<b>Natural Gas</b>								
Primary Energy Supply	-	-	3	186	1,440	4,649	5,108	5,653
Indigenous Production	-	-	3	186	1,440	5,935	6,638	6,139
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-1,286	-1,530	-486
Transformation Sector	-	-	-3	-165	-1,422	-4,549	-4,872	-4,916
Power Generation	-	-	-3	-165	-1,102	-4,549	-4,872	-4,916
Final Energy Consumption	-	-	-	22	18	100	326	542
Industry	-	-	-	22	18	100	326	542
Transport	-	-	-	-	-	-	-	-
Residential & Commercial	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-energy	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	-	-	746	1,260	2,284	4,598	5,285	5,750
Thermal	-	-	285	350	1,033	3,093	3,530	3,782
Hydro	-	-	462	910	1,251	1,505	1,755	1,968
Nuclear	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	532	963	1,927	3,967	4,630	5,256
Industry	-	-	245	397	782	1,870	2,312	2,765
Transport	-	-	5	9	21	-	-	37
Residential & Commercial	-	-	249	516	1,088	2,048	2,270	2,405
Agriculture	-	-	34	41	37	49	49	49

Note: Total excludes non-commercial biomass supply and consumption.

## Major Economic Indicators of Viet Nam

	1980	1985	1990	1995	2000	2005	2006	2007
Population (Millions) *1	53.70	58.87	66.20	72.98	77.64	83.11	84.14	85.15
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	N.A.	11.89	15.02	22.28	31.17	44.77	48.45	52.56
Real Term (Billions of 2000 Price and 2000 PPP)	N.A.	41.84	52.86	78.40	109.71	157.56	170.53	184.99
Nominal (Billions of Current USD)	N.A.	N.A.	6.47	20.74	31.17	52.92	60.91	71.03
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	N.A.	202	227	305	402	539	576	617
Real Term (2000 Price and 2000 PPP)	N.A.	711	798	1,074	1,413	1,896	2,027	2,172
Nominal (Current USD)	N.A.	N.A.	98	284	402	637	724	834
Nominal GDP & its Components (Billions of Current VND) *1								
Gross Domestic Product	N.A.	117	41,955	228,892	441,646	839,211	974,266	1,144,015
Household Final Consumption Expenditure, etc.	N.A.	N.A.	35,559	168,492	293,507	533,141	617,182	741,924
General Government Final Consumption Expenditure	N.A.	N.A.	5,177	18,741	28,346	51,652	58,734	69,397
Gross Fixed Capital Formation	N.A.	N.A.	N.A.	58,187	122,101	275,841	324,949	424,852
Stock Change	N.A.	N.A.	N.A.	3,944	8,670	22,702	33,680	51,598
Exports of Goods and Services	N.A.	N.A.	15,120	75,106	243,049	582,069	716,652	878,473
Imports of Goods and Services	N.A.	N.A.	18,996	95,925	253,927	617,157	765,827	1,032,158
Real GDP & its Components (Billions of 1994 VND) *1								
Gross Domestic Product	N.A.	104,378	131,844	195,567	273,666	393,031	425,373	461,443
Household Final Consumption Expenditure, etc.	N.A.	N.A.	N.A.	142,916	182,420	254,484	275,723	302,184
General Government Final Consumption Expenditure	N.A.	N.A.	N.A.	15,976	18,245	25,620	27,797	30,272
Gross Fixed Capital Formation	N.A.	N.A.	N.A.	49,715	78,552	133,141	146,325	179,993
Stock Change	N.A.	N.A.	N.A.	3,534	4,944	10,150	13,922	19,018
Exports of Goods and Services	N.A.	N.A.	22,632	55,659	141,911	325,707	401,263	485,496
Imports of Goods and Services	N.A.	N.A.	30,495	73,536	151,996	350,145	431,814	564,625
Sectional Shares of Real GDP (%) *3								
Agriculture, Fishery and Forest	N.A.	35	32	26	23	20	19	18
Industry	N.A.	25	25	30	35	40	41	42
Services, etc.	N.A.	39	43	44	41	40	40	40
Industrial Production Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	0.338	0.698	2.404	5.449	14.483	32.442	39.826	48.576
Imports, c.i.f.	1.314	1.857	2.752	8.155	15.638	36.761	44.891	62.678
Balance of Payments (Billions of Current USD) *1								
Trade Balance	N.A.	N.A.	N.A.	N.A.	0.375	-2.439	-2.776	-10.360
Current Account	N.A.	N.A.	N.A.	N.A.	1.106	-0.560	-0.164	-6.992
Overall Balance	N.A.	N.A.	N.A.	N.A.	0.110	2.130	4.324	10.206
Foreign Exchange Rate (VND/USD) *1	N.A.	N.A.	6,482.80	11,038.25	14,167.75	15,858.92	15,994.25	16,105.13
Purchasing Power Parity (VND/International Dollar) *1	N.A.	4.01	972.70	3,170.18	4,025.54	4,712.69	4,900.68	5,167.45
Price Indices								
GDP Deflator (1994=100) *3	N.A.	0.1	31.8	117.0	161.4	213.5	229.0	247.9
Wholesale Price Index (2000=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index (2005=100)	N.A.	N.A.	N.A.	67.1	80.3	100.0	107.4	116.3
Growth Rate (%) *3								
Real GDP	N.A.	3.81	5.10	9.54	6.79	8.44	8.23	8.48
Population	2.14	2.04	2.20	1.81	0.16	1.31	1.24	1.21
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index	N.A.	N.A.	N.A.	N.A.	-1.7	8.3	7.4	8.3

Source           \*1 : "World Development Indicators", World Bank  
                  \*2 : "International Financial Statistics", International Monetary Fund  
                  \*3 : Calculated from \*1 and \*2 by the Coordinating Agency

Note            : N.A. means "not available"  
                  : VND means Dong, USD means United States Dollar  
                  : PPP means Purchasing Power Parity



## 3.22 APEC Region

## 3.22.1 Primary Energy Supply Table

## Primary Energy Supply Table in 2007

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Coal &amp; Coal Products</b>									
Indigenous Production	218,406	-	33,887	161	1,322,584	-	121,445	722	1,328
Import	27	-	13,555	3,945	30,634	7,727	38	112,980	54,475
Export	-158,314	-	-17,984	-31	-38,343	-2	-89,646	-1,072	-
Stock Change	-5,365	-	617	-756	-10,044	-245	2,501	-	505
<b>Total</b>	<b>54,754</b>	<b>-</b>	<b>30,075</b>	<b>3,319</b>	<b>1,304,830</b>	<b>7,480</b>	<b>34,337</b>	<b>112,630</b>	<b>56,307</b>
<b>Crude oil &amp; Petroleum Products</b>									
Indigenous Production	25,302	9,440	161,514	593	186,318	-	46,073	833	581
Import	31,730	8	56,716	18,294	205,572	17,666	37,225	251,754	145,217
Export	-16,558	-8,704	-120,333	-1,218	-21,975	-960	-23,917	-13,740	-39,343
Stock Change	430	39	-1,717	-899	-4,162	-619	45	3,102	851
<b>Total</b>	<b>40,068</b>	<b>783</b>	<b>95,546</b>	<b>16,768</b>	<b>362,959</b>	<b>7,732</b>	<b>59,425</b>	<b>236,011</b>	<b>97,626</b>
<b>Natural Gas</b>									
Indigenous Production	38,534	11,394	150,630	1,083	64,462	-	63,537	3,448	317
Import	4,598	-	10,203	2,339	3,743	2,041	-	78,437	29,915
Export	-17,774	-8,240	-90,037	-	-2,421	-	-30,563	-	-
Stock Change	-	12	8,225	-69	-	-172	-	-19	955
<b>Total</b>	<b>25,359</b>	<b>3,166</b>	<b>79,021</b>	<b>3,353</b>	<b>65,784</b>	<b>1,870</b>	<b>32,975</b>	<b>81,865</b>	<b>31,187</b>
<b>Nuclear Power</b>									
Indigenous Production	-	-	24,364	-	16,191	-	-	72,710	37,249
<b>Hydro Power</b>									
Indigenous Production	1,266	-	31,693	1,958	41,733	-	971	7,313	434
<b>Geothermal, Solar, etc</b>									
Indigenous Production	679	-	262	-	-	-	6,038	3,551	79
<b>Primary Energy</b>									
Indigenous Production	289,540	20,834	413,806	8,529	1,637,717	98	238,064	96,361	42,559
Import	36,355	8	82,398	24,718	240,314	28,377	37,263	443,171	229,636
Export	-192,646	-16,944	-232,208	-1,250	-63,992	-1,309	-144,127	-14,811	-39,343
Stock Change	-4,935	51	7,125	-1,724	-14,206	-1,036	2,546	3,083	2,311
<b>Total</b>	<b>127,479</b>	<b>3,949</b>	<b>270,487</b>	<b>30,273</b>	<b>1,797,040</b>	<b>17,776</b>	<b>133,746</b>	<b>521,865</b>	<b>225,483</b>

## Primary Energy Supply Table in 2006

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Coal &amp; Coal Products</b>									
Indigenous Production	203,509	-	32,350	277	1,239,304	-	105,348	685	1,210
Import	31	-	12,691	3,168	23,048	7,182	60	107,524	50,377
Export	-149,984	-	-16,846	-6	-43,008	-0	-78,093	-1,321	-
Stock Change	2,336	-	405	2	3,082	-331	-	-528	1,022
<b>Total</b>	<b>55,892</b>	<b>-</b>	<b>28,600</b>	<b>3,441</b>	<b>1,222,426</b>	<b>6,851</b>	<b>27,315</b>	<b>106,359</b>	<b>52,610</b>
<b>Crude oil &amp; Petroleum Products</b>									
Indigenous Production	23,080	11,222	155,931	154	184,766	-	48,922	779	571
Import	31,963	13	57,239	15,775	190,160	16,436	33,230	260,360	145,107
Export	-14,326	-10,536	-116,103	-2,130	-21,598	-1,187	-23,847	-9,171	-39,131
Stock Change	-492	70	-472	-1,276	-1,121	-188	-	-2,482	-2,506
<b>Total</b>	<b>39,214</b>	<b>770</b>	<b>96,059</b>	<b>12,522</b>	<b>349,864</b>	<b>7,731</b>	<b>58,305</b>	<b>243,180</b>	<b>93,614</b>
<b>Natural Gas</b>									
Indigenous Production	36,933	11,816	154,909	2,054	54,513	-	67,942	3,061	393
Import	1,204	-	7,923	5,365	88	2,185	-	73,004	29,550
Export	-14,611	-8,537	-83,797	-	-2,698	-	-29,590	-	-
Stock Change	-	-10	616	-349	-	-21	-	-26	-1,249
<b>Total</b>	<b>23,526</b>	<b>3,269</b>	<b>79,651</b>	<b>7,071</b>	<b>51,903</b>	<b>2,164</b>	<b>38,352</b>	<b>76,039</b>	<b>28,694</b>
<b>Nuclear Power</b>									
Indigenous Production	-	-	25,529	-	14,292	-	-	79,298	38,764
<b>Hydro Power</b>									
Indigenous Production	1,378	-	30,569	2,475	37,478	-	821	8,230	449
<b>Geothermal, Solar, etc</b>									
Indigenous Production	206	-	217	1	-	-	5,726	3,659	62
<b>Primary Energy</b>									
Indigenous Production	270,093	23,038	411,225	9,691	1,536,025	93	228,760	103,691	43,846
Import	33,200	13	79,911	24,504	213,760	26,740	33,291	440,888	225,063
Export	-178,921	-19,073	-220,441	-2,136	-68,359	-1,577	-131,531	-10,492	-39,131
Stock Change	1,844	60	549	-1,622	1,961	-540	-	-3,036	-2,733
<b>Total</b>	<b>125,206</b>	<b>4,039</b>	<b>270,710</b>	<b>30,436</b>	<b>1,681,044</b>	<b>17,388</b>	<b>130,520</b>	<b>524,745</b>	<b>216,618</b>

Note: Primary Energy in Indonesia, Peru, Thailand and Viet Nam exclude non-commercial biomass.

Primary Energy Supply Table in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
492	6,000	2,828	-	78	1,791	146,084	-	-	5,204	567,794	24,186	2,452,991
7,203	2,851	385	-	869	4,079	12,995	-	40,457	9,030	21,894	439	323,583
-233	-6	-1,461	-	-	422	-55,862	-	-7	-	-34,200	-17,854	-414,596
108	252	-224	-	71	-	-1,064	-	-157	-	-1,337	2,910	-12,228
7,570	9,097	1,528	-	1,018	6,292	102,153	-	40,293	14,234	554,151	9,681	2,349,750
36,989	182,296	2,099	1,987	5,386	827	490,119	-	16	14,069	317,626	16,876	1,498,943
18,042	26,304	7,188	1,532	7,104	15,919	2,744	111,725	67,962	41,042	705,923	14,834	1,784,501
-26,791	-98,882	-1,746	-1,659	-4,225	-3,364	-354,972	-62,542	-17,779	-9,276	-71,562	-16,302	-915,850
174	-755	-143	-425	-1,650	277	671	-	287	2,454	4,977	-874	2,062
28,344	108,090	7,087	1,435	6,615	13,425	138,562	17,637	48,398	48,288	926,742	14,534	2,276,078
50,961	42,973	3,650	326	2,597	3,033	521,998	-	371	14,611	445,785	6,139	1,425,848
4,922	8,842	-	-	-	-	5,989	5,960	11,393	8,314	107,228	-	283,923
-27,016	-1,226	-	-	-	-	-155,008	-	-	-	-18,873	-486	-351,643
-	-84	-1	-	-	-	-6,912	-	122	-	4,451	-	6,508
28,866	50,505	3,649	326	2,597	3,033	366,067	5,960	11,886	22,925	538,591	5,653	1,364,636
-	2,716	-	-	-	-	41,730	-	10,565	-	218,027	-	423,551
558	2,346	2,022	74	2,101	736	15,435	-	718	698	23,697	1,968	135,720
-	6,499	3,238	-	7	8,790	418	-	133	2	19,990	-	49,686
89,000	251,069	14,945	2,387	10,525	22,162	1,222,366	104	14,249	36,063	1,673,923	49,170	6,133,470
30,167	38,021	7,573	1,532	7,973	20,000	22,215	117,685	119,902	58,772	840,306	15,499	2,401,886
-54,236	-100,239	-3,207	-1,659	-4,225	-2,943	-567,430	-62,542	-17,787	-9,356	-126,367	-34,642	-1,691,261
282	-587	-367	-425	-1,579	277	-7,208	-	252	2,454	7,948	2,036	-3,704
65,143	187,392	18,633	1,835	12,694	39,263	669,942	23,701	114,529	87,933	2,365,588	32,062	6,746,813

Primary Energy Supply Table in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
486	5,510	3,471	-	75	1,243	143,178	-	-	4,750	576,759	21,790	2,339,946
5,829	3,900	630	-	712	4,073	14,195	5	41,097	7,097	22,825	64	304,508
-60	-4	-1,954	-	-	-	-51,280	-	-	-	-29,057	-11,936	-383,551
-234	-326	-54	-	-3	-	591	-	-28	-	-20,752	-872	-15,689
6,020	9,081	2,093	-	784	5,316	106,685	5	41,069	11,847	549,775	9,045	2,245,215
37,073	190,482	1,044	2,867	5,456	702	478,206	-	21	12,736	317,812	18,117	1,489,941
15,769	19,276	6,876	1,648	6,330	15,311	2,376	107,159	63,373	43,156	717,365	12,170	1,761,092
-26,851	-107,856	-818	-2,917	-3,562	-2,365	-337,803	-58,260	-14,937	-10,185	-65,224	-17,510	-886,317
454	-284	61	-294	-1,246	-103	-4,271	-	-1,018	1,924	-5,036	-	-18,280
26,358	100,740	6,864	1,305	6,979	13,420	138,508	17,897	45,109	47,631	937,122	12,777	2,255,969
49,449	40,534	3,279	259	1,859	2,530	525,756	-	412	14,144	431,698	6,638	1,408,177
2,895	8,291	-	-	-	-	5,815	5,649	10,673	7,952	97,231	-	257,826
-25,957	-296	-	-	-	-	-163,852	-	-	-	-16,581	-1,530	-347,450
-	37	-	-	-	-	-9,093	-	-128	-	-10,133	-	-20,354
26,386	48,565	3,279	259	1,859	2,530	358,625	5,649	10,957	22,097	502,216	5,108	1,298,199
-	2,832	-	-	-	-	40,791	-	10,390	-	212,700	-	424,597
554	2,614	2,009	74	1,685	855	15,074	-	685	699	27,321	1,755	134,725
-	5,848	3,153	-	2	9,005	399	-	108	2	18,929	-	47,316
87,561	255,984	14,034	3,201	9,268	21,378	1,210,785	295	13,389	33,537	1,662,190	48,300	5,986,383
24,493	31,513	7,506	1,648	7,042	19,385	22,826	112,813	115,142	58,649	842,493	12,317	2,333,197
-52,868	-108,267	-2,773	-2,917	-3,562	-2,365	-554,735	-58,260	-14,937	-10,250	-112,949	-30,976	-1,626,520
220	-574	7	-294	-1,249	-103	-12,670	-	-1,173	1,924	-36,178	-872	-54,479
59,318	177,776	18,475	1,638	11,499	38,171	666,206	23,845	110,091	83,861	2,327,761	28,769	6,548,115

## 3.22.2 Final Energy Consumption Table

Final Energy Consumption Table in 2007

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Total	79,052	810	205,661	24,679	1,055,236	10,914	88,297	352,799	149,816
Coal & Coal Products	3,445	-	3,249	674	392,470	2	16,217	37,752	8,600
Crude oil & Petroleum Products	39,535	513	92,986	12,877	326,157	6,742	51,733	194,112	83,900
Natural Gas	13,440	29	55,814	2,326	53,248	646	9,912	28,487	16,995
Electricity	18,365	268	43,717	4,561	229,950	3,523	10,435	88,251	33,642
Others	4,268	-	9,896	4,241	53,412	-	-	4,197	6,679
Industry	26,494	102	57,501	8,619	593,085	656	35,427	156,733	41,689
Coal & Coal Products	3,273	-	3,214	664	277,234	2	16,217	36,890	7,599
Crude oil & Petroleum Products	3,826	54	6,216	3,196	87,733	319	7,613	64,526	7,296
Natural Gas	8,552	-	22,724	226	28,122	21	7,658	13,961	4,890
Electricity	8,213	48	17,446	3,080	162,640	313	3,939	38,348	17,245
Others	2,630	-	7,901	1,452	37,358	-	-	3,008	4,658
Transport	30,248	434	58,821	8,258	129,984	6,237	26,515	90,197	33,313
Coal & Coal Products	85	-	-	-	4,504	-	-	-	-
Crude oil & Petroleum Products	29,532	434	54,325	8,200	119,927	6,178	26,501	88,368	32,520
Natural Gas	403	-	4,149	23	979	-	6	-	582
Electricity	228	-	348	35	4,574	60	7	1,829	211
Others	-	-	-	-	-	-	-	-	-
Agriculture	2,085	0	3,793	-	42,628	-	-	4,723	1,793
Coal & Coal Products	-	-	-	-	12,416	-	-	-	-
Crude oil & Petroleum Products	1,923	0	2,533	-	21,765	-	-	4,385	1,273
Natural Gas	3	-	479	-	-	-	-	-	2
Electricity	160	-	779	-	8,419	-	-	339	518
Others	-	-	2	-	28	-	-	-	-
Residential & Commercial	16,201	265	62,750	5,956	169,206	4,020	15,730	93,982	36,807
Coal & Coal Products	87	-	36	4	59,056	-	-	862	1,001
Crude oil & Petroleum Products	856	17	10,516	1,205	37,724	245	9,191	29,669	6,749
Natural Gas	3,857	29	25,120	533	18,747	625	51	14,526	11,521
Electricity	9,763	220	25,129	1,425	39,152	3,150	6,488	47,736	15,515
Others	1,637	-	1,948	2,789	14,528	-	-	1,189	2,020

Final Energy Consumption Table in 2006

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Total	76,805	785	197,279	22,720	976,268	10,600	74,906	360,941	144,578
Coal & Coal Products	3,449	-	3,101	865	375,586	0	11,543	36,758	8,322
Crude oil & Petroleum Products	38,301	514	90,520	11,952	308,054	6,550	43,021	203,736	81,573
Nature Gas/ LNG & Town Gas	13,157	13	50,558	1,321	45,062	581	10,657	27,182	16,300
Electricity	18,029	258	42,702	4,355	199,419	3,469	9,684	89,583	31,936
Others	3,869	-	10,397	4,226	48,147	-	-	3,683	6,447
Industry	25,962	104	54,343	8,442	544,123	546	30,239	156,147	40,201
Coal & Coal Products	3,282	-	3,062	850	260,583	0	11,527	35,773	7,218
Crude oil & Petroleum Products	3,734	56	6,019	2,619	88,302	191	8,717	68,024	7,846
Natural Gas	8,298	-	19,328	732	24,399	19	6,244	12,053	4,366
Electricity	8,076	48	17,494	2,936	138,215	335	3,751	37,794	16,294
Others	2,572	-	8,439	1,305	32,623	-	-	2,502	4,478
Transport	29,462	429	56,318	8,152	116,023	6,174	25,512	92,728	32,212
Coal & Coal Products	79	-	-	0	4,764	-	-	-	-
Crude oil & Petroleum Products	28,779	429	51,838	8,088	106,483	6,116	25,507	90,876	31,542
Natural Gas	379	-	4,091	36	757	-	5	-	452
Electricity	225	-	390	28	4,019	58	-	1,852	218
Others	-	-	-	-	-	-	-	-	-
Agriculture	2,113	0	3,613	-	43,039	-	-	5,280	1,776
Coal & Coal Products	-	-	-	-	12,258	-	-	-	-
Crude oil & Petroleum Products	1,952	0	2,324	-	22,615	-	-	4,955	1,269
Natural Gas	2	-	440	-	-	-	-	-	25
Electricity	160	-	847	-	8,145	-	-	325	482
Others	-	-	1	-	21	-	-	-	-
Residential & Commercial	15,640	28	59,548	6,001	159,219	3,880	14,410	99,326	36,640
Coal & Coal Products	87	-	39	5	61,082	-	16	984	1,104
Crude oil & Petroleum Products	831	15	10,309	1,170	33,335	243	8,797	32,421	7,313
Natural Gas	3,856	13	23,323	529	15,298	562	43	15,128	11,457
Electricity	9,568	-	23,963	1,376	35,250	3,076	5,554	49,612	14,797
Others	1,298	-	1,914	2,921	14,254	-	-	1,181	1,969

Notes: Primary Energy in Indonesia, Peru, Thailand and Viet Nam exclude non-commercial biomass.  
Others includes Non-energy.



Final Energy Consumption Table in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
43,038	117,930	13,317	1,055	10,030	23,429	443,382	15,824	69,951	57,206	1,611,354	25,600	4,399,379
1,163	1,983	535	-	613	1,419	23,720	-	6,589	6,918	27,725	6,089	539,166
24,803	76,489	6,921	805	6,560	12,109	106,833	12,527	42,926	36,378	875,868	13,713	2,024,490
9,392	15,392	1,434	-	535	77	131,172	110	2,051	2,497	320,949	542	665,047
7,680	16,889	3,333	249	2,321	4,129	60,281	3,186	18,289	11,413	328,934	5,256	894,670
-	7,177	1,093	-	-	5,694	121,376	-	95	-	57,879	-	276,006
16,210	29,008	3,542	588	4,000	6,098	133,732	8,251	22,586	18,416	289,529	10,197	1,462,464
1,163	1,983	402	-	613	1,238	19,103	-	6,272	6,918	25,991	4,732	413,508
6,059	5,296	428	411	1,665	2,136	12,484	6,861	5,120	3,981	31,128	2,158	258,507
5,403	10,676	662	-	454	77	26,849	47	929	2,296	111,169	542	245,257
3,585	9,877	1,251	177	1,269	1,397	30,339	1,343	10,265	5,220	79,879	2,765	398,640
-	1,176	799	-	-	1,250	44,957	-	-	-	41,362	-	146,551
15,688	54,019	5,849	353	3,780	8,199	99,209	5,417	14,250	23,636	661,509	8,115	1,284,032
-	-	-	-	-	-	-	-	-	-	-	-	4,589
15,551	52,747	5,812	353	3,734	8,190	56,804	5,417	14,179	23,423	645,685	8,078	1,205,959
133	1,170	6	-	46	-	34,953	-	-	200	15,120	-	57,769
3	102	32	-	-	9	7,452	-	71	12	703	37	15,715
-	-	-	-	-	-	-	-	-	-	-	-	-
266	3,428	360	-	50	242	10,111	4	141	3,448	16,339	576	89,986
-	-	33	-	-	-	82	-	-	-	48	21	12,600
266	2,698	150	-	13	199	4,352	-	4	3,424	15,922	506	59,412
-	-	39	-	-	-	946	-	-	-	-	-	1,468
-	730	137	-	34	42	1,391	4	138	23	-	49	12,764
-	-	-	-	3	-	3,340	-	-	-	369	-	3,742
6,204	22,508	2,644	-	1,805	8,445	151,634	1,902	11,351	8,303	471,882	5,301	1,096,895
-	-	100	-	0	-	4,270	-	-	-	1,686	1,336	68,437
2,082	9,229	155	-	790	1,320	9,053	-	2,406	2,205	39,678	1,559	164,651
31	1,099	219	-	14	-	44,325	63	1,122	-	179,714	-	301,596
4,091	6,180	1,875	-	1,001	2,681	21,076	1,839	7,728	6,098	234,656	2,405	438,207
-	6,001	295	-	-	4,444	72,910	-	95	-	16,148	-	124,004

Final Energy Consumption Table in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
38,912	113,008	13,214	1,028	9,494	22,438	437,099	15,251	65,449	55,308	1,585,985	22,779	4,244,846
1,141	1,922	528	-	397	1,324	19,863	-	7,254	7,569	28,018	5,528	513,169
22,361	72,867	6,901	787	6,724	11,341	102,881	12,084	38,798	34,637	880,466	12,294	1,986,361
8,142	14,676	1,410	-	334	53	130,665	108	2,010	2,151	304,328	326	629,033
7,268	16,412	3,302	241	2,038	3,928	58,600	3,058	17,296	10,951	320,114	4,630	847,274
-	7,131	1,074	-	1	5,793	125,089	-	92	-	53,058	-	269,008
15,911	27,674	3,399	553	3,615	5,324	134,333	8,100	24,792	17,728	287,891	9,049	1,398,476
1,141	1,922	382	-	397	1,175	13,915	-	7,245	7,569	26,478	4,176	386,697
5,129	4,668	379	381	1,787	1,547	10,842	6,760	7,321	3,027	35,493	2,235	265,080
6,168	10,397	611	-	321	53	31,587	46	900	2,071	108,492	326	236,411
3,473	9,551	1,247	172	1,110	1,344	30,406	1,294	9,327	5,061	78,837	2,312	369,077
-	1,135	779	-	0	1,206	47,582	-	-	-	38,591	-	141,212
14,799	50,998	5,827	344	3,946	8,039	98,176	5,075	14,768	22,980	655,742	7,560	1,255,263
-	-	-	-	-	-	-	-	-	-	-	-	4,843
14,689	49,889	5,794	344	3,939	8,030	57,231	5,075	14,680	22,895	640,935	7,560	1,180,718
105	1,006	4	-	7	-	33,560	-	-	80	14,175	-	54,655
5	102	30	-	-	8	7,385	-	88	5	633	-	15,046
-	-	-	-	-	-	-	-	-	-	-	-	-
238	3,326	377	-	0	61	9,623	4	137	3,310	17,733	581	91,212
-	-	45	-	-	-	133	-	-	-	22	22	12,481
238	2,581	166	-	0	20	4,202	-	4	3,290	17,419	511	61,546
-	-	40	-	-	-	487	-	-	-	-	-	994
-	745	127	-	-	41	1,442	4	133	21	-	49	12,519
-	-	-	-	-	-	3,358	-	-	-	292	-	3,673
5,422	22,435	2,595	-	1,667	8,579	149,671	1,823	11,093	7,825	450,076	5,196	1,061,073
-	-	101	-	0	-	5,248	-	-	-	1,518	1,331	71,514
1,606	9,366	145	-	783	1,457	7,612	-	2,234	2,016	39,297	1,596	160,547
25	1,059	256	-	6	-	43,331	62	1,110	-	167,077	-	283,135
3,790	6,014	1,798	-	877	2,535	19,343	1,761	7,656	5,808	228,009	2,270	423,057
-	5,997	295	-	1	4,587	74,137	-	92	-	14,175	-	122,820

## 3.22.3 Demand and Supply Table

**Demand & Supply Table of Coal in 2006**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	203,509	-	32,350	277	1,239,304	-	105,348	685	1,210
Import	-	-	12,038	3,168	23,048	7,182	60	106,337	50,173
Export	-149,984	-	-16,779	-	-33,144	-0	-78,093	-	-
Stock Change	2,705	-	375	-2	5,338	-331	-	-528	1,022
Primary Energy Supply	56,229	-	27,985	3,443	1,234,546	6,851	27,315	106,494	52,406
Coal Transformation	-3,360	-	-2,926	-504	-217,308	-	-19	-39,765	-14,838
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-	-	-	-	-7,260	-	-	-	-
Power Generation (Public Utilities)	-50,302	-	-23,300	-2,483	-601,591	-6,851	-15,092	-47,318	-32,183
Power Generation (Auto Producers)	-	-	-5	-8	-55,615	-	-	-9,113	-1,555
Final Energy Consumption	2,541	-	1,660	448	302,877	0	11,527	14,614	4,453

**Demand & Supply Table of Crude Oil in 2006**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	23,080	11,208	155,931	154	184,766	-	48,922	779	571
Import	20,002	-	42,840	11,483	145,175	-	15,768	210,313	122,761
Export	-12,550	-10,536	-95,275	-	-6,337	-	-18,019	-	-2
Stock Change	-276	77	173	-500	-1,111	-	-	-1,007	-1,485
Primary Energy Supply	30,255	749	103,669	11,137	322,492	-	46,672	210,085	121,845
Coal Transformation	-	-	-	-	-	-	-	-	-
Refining	-33,352	-735	-98,068	-11,683	-310,460	-	-44,402	-208,379	-129,112
Gas processing	-	-	-	-	-	-	-	-	-
Power Generation (Public Utilities)	-	-	-	-	-	-	-	-6,557	-
Power Generation (Auto Producers)	-	-	-	-	-238	-	-	-	-
Final Energy Consumption	-	-	-	-	4,103	-	-	-	-

**Demand & Supply Table of Natural Gas & LNG in 2006**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	36,933	11,816	154,909	2,054	54,513	-	67,942	3,061	393
Import	1,204	-	7,923	5,365	88	2,185	-	73,004	29,550
Export	-14,611	-8,537	-83,797	-	-2,698	-	-29,590	-	-
Stock Change	-	-10	616	-349	-	-21	-	-26	-1,249
Primary Energy Supply	23,526	3,269	79,651	7,071	51,903	2,164	38,352	76,039	28,694
Coal Transformation	-79	-	-	-	-	-	-	-	-
Refining	-	-	-	-	-	-	-	-	-
Gas processing	1,258	-80	-990	-2,907	8,378	581	-7,906	1,291	73
Power Generation (Public Utilities)	-4,822	-1,040	-5,440	-2,131	-	-2,164	-3,752	-44,941	-11,933
Power Generation (Auto Producers)	-2,729	-883	-1,764	-124	-5,482	-	-	-3,279	-747
Final Energy Consumption	13,157	13	50,558	1,321	45,062	581	10,657	27,182	16,300

Demand &amp; Supply Table of Coal in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
486	5,510	3,471	-	75	1,243	143,178	-	-	4,750	576,759	21,790	2,339,946
5,829	3,696	630	-	507	4,073	14,159	-	40,872	4,005	20,404	64	296,246
-60	-2	-1,954	-	-	-	-50,013	-	-	-	-28,095	-11,936	-370,061
-234	-868	-54	-	13	-	569	-	-28	-	-20,710	-872	-13,605
6,020	8,337	2,093	-	594	5,316	107,893	-	40,844	8,755	548,358	9,045	2,252,526
-	-1,404	-409	-	-	-	-24,346	-	-4,225	-	-76,118	-	-385,220
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-2,001	-	-9,260
-5,095	-6,812	-1,143	-	-233	-3,714	-55,112	-	-22,379	-4,816	-431,426	-3,517	-1,313,367
-	-	-12	-	-	-	-19,599	-	-6,739	-	-3,377	-	-96,023
1,141	121	528	-	367	1,324	8,241	-	5,244	4,709	24,108	5,528	389,431

Demand &amp; Supply Table of Crude Oil in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
34,986	190,482	1,044	2,867	5,456	702	478,206	-	21	10,283	317,812	17,510	1,484,780
8,043	465	4,779	993	5,330	10,354	2,332	52,745	52,199	41,773	604,719	-	1,352,074
-17,330	-103,208	-741	-2,482	-1,256	-678	-249,687	-	-	-3,349	-5,605	-17,510	-544,565
103	-310	102	-294	-188	-80	-2,149	-	-293	2,414	1,015	-	-3,810
25,802	87,429	5,184	1,084	9,342	10,298	228,702	52,745	51,927	51,122	917,941	-	2,288,479
-	-	-	-	-	-	-	-	-	-	-	-	-
-24,971	-75,006	-5,295	-1,060	-8,701	-9,897	-225,048	-52,745	-52,244	-48,094	-867,235	-	-2,206,487
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-6,557
-	-	-	-	-	-	-779	-	-	-	-	-	-1,016
-	-	-	12	-	-	59	-	-	2,801	-	-	6,975

Demand &amp; Supply Table of Natural Gas &amp; LNG in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
49,449	40,534	3,279	259	1,859	2,530	525,756	-	412	14,144	431,698	6,638	1,408,177
2,895	8,291	-	-	-	-	5,815	5,649	10,673	7,952	97,231	-	257,826
-25,957	-296	-	-	-	-	-163,852	-	-	-	-16,581	-1,530	-347,450
-	37	-	-	-	-	-9,093	-	-128	-	-10,133	-	-20,354
26,386	48,565	3,279	259	1,859	2,530	358,625	5,649	10,957	22,097	502,216	5,108	1,298,199
-	-	-	-	-	-	-	-	-	-	-	-	-79
-	-	-	-	-	-	-	-	-	-	-	-	-
-4,809	-	-	-	-	-	-	108	-751	-	1,267	-	-4,486
-10,773	-19,444	-1,683	-	-1,043	-2,311	-192,545	-5,649	-7,574	-17,784	-145,009	-4,872	-484,912
-1,208	-7,297	-144	-111	-	-	-17,119	-	-163	-2,162	-13,362	-	-56,573
8,142	14,676	1,410	-	334	53	130,665	108	2,010	2,151	304,328	326	629,033

**Demand & Supply Table of Coal in 2007**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	218,406	-	33,887	161	1,322,584	-	121,445	722	1,328
Import	-	-	12,990	3,922	30,633	7,727	38	111,588	54,117
Export	-158,314	-	-17,868	-	-27,908	-2	-89,646	-	-
Stock Change	-4,998	-	617	-706	-5,369	-245	2,501	-	505
Primary Energy Supply	55,094	-	29,626	3,377	1,319,940	7,480	34,337	112,310	55,949
Coal Transformation	-3,361	-	-2,912	-475	-226,598	-	-28	-39,718	-16,008
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-	-	-	-	-8,038	-	-	-	-
Power Generation (Public Utilities)	-49,137	-	-24,654	-2,520	-660,037	-7,478	-18,110	-48,517	-34,051
Power Generation (Auto Producers)	-	-	-5	-6	-61,982	-	-	-8,757	-1,491
Final Energy Consumption	2,518	-	1,806	336	309,177	2	16,199	15,892	4,779

**Demand & Supply Table of Crude Oil in 2007**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	25,302	9,424	161,514	593	186,318	-	46,073	833	581
Import	20,740	-	43,238	11,095	163,160	-	15,483	206,464	120,853
Export	-15,104	-8,704	-98,608	-	-3,884	-	-17,633	-	-27
Stock Change	272	40	-1,101	-458	-5,244	-	212	2,370	670
Primary Energy Supply	31,210	760	105,043	11,229	340,351	-	44,134	209,668	122,077
Coal Transformation	-	-	-	-	-	-	-	-	-
Refining	-34,936	-696	-100,336	-10,765	-328,326	-	-43,789	-206,946	-130,789
Gas processing	-	-	-	-	-	-	-	-	-
Power Generation (Public Utilities)	-	-	-	-	-	-	-	-7,787	-
Power Generation (Auto Producers)	-	-	-	-	-165	-	-	-	-
Final Energy Consumption	-	-	-	-	4,132	-	-	-	-

**Demand & Supply Table of Natural Gas & LNG in 2007**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	38,534	11,394	150,630	1,083	64,462	-	63,537	3,448	317
Import	4,598	-	10,203	2,339	3,743	2,041	-	78,437	29,915
Export	-17,774	-8,240	-90,037	-	-2,421	-	-30,563	-	-
Stock Change	-	12	8,225	-69	-	-172	-	-19	955
Primary Energy Supply	25,359	3,166	79,021	3,353	65,784	1,870	32,975	81,865	31,187
Coal Transformation	-82	-	-	-	-	-	-	-	-
Refining	-	-	-	-	-	-	-	-	-
Gas processing	1,293	-92	-1,150	8	7,791	397	-6,915	1,097	48
Power Generation (Public Utilities)	-6,355	-1,030	-6,176	-882	-	-1,224	-4,793	-50,517	-13,862
Power Generation (Auto Producers)	-3,015	-863	-1,923	-37	-9,357	-	-	-3,315	-528
Final Energy Consumption	13,440	29	55,814	2,326	53,248	646	9,912	28,487	16,995

Demand &amp; Supply Table of Coal in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
492	6,000	2,828	-	78	1,791	146,084	-	-	5,204	567,794	24,186	2,452,991
7,203	2,677	385	-	672	4,079	12,878	-	40,087	5,026	20,430	375	314,827
-233	-4	-1,461	-	-	422	-53,661	-	-	-	-33,341	-17,854	-399,871
108	-325	-224	-	74	-	-956	-	-150	-	-1,368	2,910	-7,626
7,570	8,348	1,528	-	825	6,292	104,344	-	39,938	10,230	553,516	9,617	2,360,321
-	-1,411	-395	-	-	-	-25,370	-	-3,871	-	-96,996	-	-417,142
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-1,843	-	-9,881
-6,400	-6,795	-584	-	-242	-3,972	-51,489	-	-23,223	-6,850	-419,844	-3,208	-1,367,112
-	-	-15	-	-	-	-19,244	-	-6,924	-	-2,566	-383	-101,373
1,163	143	535	-	583	1,419	7,655	-	5,285	3,095	23,458	6,025	400,072

Demand &amp; Supply Table of Crude Oil in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
34,514	182,296	2,099	1,987	5,386	827	490,119	-	16	11,008	317,626	16,207	1,492,721
9,597	557	4,703	778	5,805	10,331	2,706	51,246	51,955	40,217	597,862	-	1,356,792
-17,023	-93,232	-1,623	-1,487	-1,442	-801	-259,872	-94	-	-2,724	-5,838	-15,333	-543,428
-155	-233	-102	-454	-55	326	697	-	230	3,221	1,381	-874	743
26,932	89,388	5,077	824	9,694	10,683	233,651	51,152	52,202	51,722	911,032	-0	2,306,829
-	-	-	-	-	-	-	-	-	-	-	-	-
-26,667	-74,708	-4,891	-800	-9,098	-10,045	-229,794	-51,152	-52,049	-48,197	-867,305	-	-2,231,289
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-7,787
-	-	-	-	-	-	-702	-	-	-	-	-	-867
-	-	-	12	-	-	40	-	-	3,345	-	-	7,529

Demand &amp; Supply Table of Natural Gas &amp; LNG in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
50,961	42,973	3,650	326	2,597	3,033	521,998	-	371	14,611	445,785	6,139	1,425,848
4,922	8,842	-	-	-	-	5,989	5,960	11,393	8,314	107,228	-	283,923
-27,016	-1,226	-	-	-	-	-155,008	-	-	-	-18,873	-486	-351,643
-	-84	-1	-	-	-	-6,912	-	122	-	4,451	-	6,508
28,866	50,505	3,649	326	2,597	3,033	366,067	5,960	11,886	22,925	538,591	5,653	1,364,636
-	-	-	-	-	-	-	-	-	-	-	-	-82
-	-	-	-	-	-	-	-	-	-	-	-	-
-6,600	-	-	-	-	-	-	110	-743	-	1,193	-	-3,562
-11,298	-19,444	-1,912	-	-1,564	-2,720	-195,089	-5,960	-8,414	-18,224	-159,405	-4,713	-513,583
-1,032	-6,832	-162	-108	-60	-	-18,974	-	-160	-2,204	-13,756	-203	-62,531
9,392	15,392	1,434	-	535	77	131,172	110	2,051	2,497	320,949	542	665,047

## 3.22.4 Power Generation Table

Power Generation Table in 2007

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Total	244,245	3,395	629,964	58,509	3,281,553	45,782	142,441	1,178,998	390,684
Thermal	222,568	3,395	156,577	32,349	2,722,933	44,642	124,097	781,259	241,839
Hydro	14,724	-	368,518	22,763	485,264	-	11,287	85,033	5,042
Nuclear	-	-	93,492	-	62,130	-	-	279,009	142,937
Geothermal	-	-	-	-	-	-	7,021	3,025	-
Others	6,953	-	11,377	3,398	11,226	1,141	36	30,673	866
Public Utilities	237,419	3,045	580,148	54,060	3,070,723	44,642	142,441	991,774	387,268
Thermal	216,038	3,045	144,660	31,682	2,512,103	44,642	124,097	630,093	238,590
Hydro	14,444	-	338,915	22,287	485,264	-	11,287	77,485	5,042
Nuclear	-	-	93,492	-	62,130	-	-	279,009	142,937
Geothermal	-	-	-	-	-	-	7,021	2,825	-
Others	6,937	-	3,081	91	11,226	-	36	2,363	699
Auto Producers	6,826	350	49,816	4,450	210,830	1,141	-	187,224	3,416
Thermal	6,530	350	11,917	667	210,830	-	-	151,167	3,249
Hydro	280	-	29,603	476	-	-	-	7,548	-
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	200	-
Others	16	-	8,296	3,307	-	1,141	-	28,310	167

Power Generation Table in 2006

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Total	236,736	3,298	607,797	55,320	2,865,726	44,257	133,108	1,163,577	370,492
Thermal	218,269	3,298	143,223	23,860	2,369,603	44,257	116,795	726,388	215,970
Hydro	16,028	-	355,455	28,779	435,786	-	9,623	97,650	5,219
Nuclear	-	-	97,964	-	54,843	-	-	304,291	148,749
Geothermal	-	-	-	-	#VALUE!	-	6,658	3,140	-
Others	2,439	-	11,155	2,680	5,494	-	32	32,109	554
Public Utilities	230,217	2,948	554,622	51,705	2,673,551	44,257	133,108	974,435	367,272
Thermal	212,038	2,948	132,067	22,887	2,177,428	44,257	116,795	575,217	212,901
Hydro	15,748	-	322,039	28,241	435,786	-	9,623	89,389	5,219
Nuclear	-	-	97,964	-	54,843	-	-	304,291	148,749
Geothermal	-	-	-	-	-	-	6,658	2,938	-
Others	2,431	-	2,552	578	5,494	-	32	2,600	403
Auto Producers	6,519	350	53,175	3,614	192,175	-	-	189,142	3,220
Thermal	6,231	350	11,156	974	192,175	-	-	151,171	3,069
Hydro	280	-	33,416	538	-	-	-	8,261	-
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	202	-
Others	8	-	8,603	2,102	-	-	-	29,509	151

Power Generation Table in 2007 (Continued)

												GWh
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
89,782	257,455	41,909	3,112	30,025	59,612	1,015,333	41,134	243,120	143,378	4,017,349	66,857	12,028,350
83,343	209,427	13,812	2,249	9,884	40,775	673,823	40,583	186,288	120,702	2,819,499	43,921	8,585,462
6,439	27,276	23,516	863	19,549	8,563	178,982	-	8,350	8,114	275,545	22,884	1,604,947
-	10,421	-	-	-	-	160,039	-	40,539	-	836,634	-	1,625,201
-	7,404	3,458	-	-	10,215	485	-	-	2	16,798	-	48,388
-	2,927	1,123	-	592	59	2,004	551	7,943	14,560	68,873	52	164,353
84,157	232,553	41,762	831	28,200	59,612	961,741	41,134	201,114	128,819	4,006,189	62,739	11,404,370
77,718	187,438	13,779	319	9,093	40,775	623,404	40,583	151,791	120,702	2,813,163	39,855	8,075,333
6,439	27,042	23,516	512	19,107	8,563	177,806	-	8,350	8,114	273,827	22,884	1,563,119
-	10,421	-	-	-	-	160,039	-	40,539	-	836,634	-	1,625,201
-	7,404	3,391	-	-	10,215	485	-	-	2	16,798	-	48,141
-	248	1,076	-	-	59	7	551	433	1	65,767	-	92,576
5,625	24,902	147	2,281	1,824	-	53,592	-	42,007	14,559	11,160	4,118	623,980
5,625	21,989	33	1,930	791	-	50,419	-	34,497	-	6,336	4,066	510,129
-	234	-	351	442	-	1,176	-	-	-	1,718	-	41,827
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	67	-	-	-	-	-	-	-	-	-	247
-	2,679	47	-	592	-	1,997	-	7,509	14,559	3,106	52	71,777

Power Generation Table in 2006 (Continued)

												GWh
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
87,306	249,648	41,645	3,012	27,370	56,784	995,794	39,442	235,372	138,742	3,979,563	61,459	11,398,925
81,523	199,183	14,083	2,149	7,723	36,325	660,868	37,818	181,448	116,883	2,768,059	41,008	8,010,554
5,784	30,394	23,355	863	19,594	9,939	175,282	-	7,999	8,125	317,689	20,408	1,568,628
-	10,866	-	-	-	-	156,436	-	39,870	-	816,195	-	1,629,214
-	6,685	3,392	-	-	10,465	463	-	-	2	16,581	-	47,386
-	2,520	815	-	53	55	2,745	1,624	6,054	13,732	61,039	43	143,142
82,622	225,079	41,503	791	25,614	56,784	945,054	39,442	195,083	125,011	3,965,847	61,459	10,797,940
76,839	177,178	14,053	279	6,452	36,325	614,058	37,818	146,947	116,883	2,760,689	41,008	7,525,947
5,784	30,305	23,355	512	19,161	9,939	174,092	-	7,999	8,125	314,655	20,408	1,521,035
-	10,866	-	-	-	-	156,436	-	39,870	-	816,195	-	1,629,214
-	6,685	3,326	-	-	10,465	463	-	-	2	16,581	-	47,119
-	45	769	-	1	55	5	1,624	266	1	57,727	43	74,625
4,684	24,569	142	2,221	1,756	-	50,740	-	40,289	13,731	13,716	-	600,985
4,684	22,005	30	1,870	1,271	-	46,810	-	34,501	-	7,370	-	484,607
-	89	-	351	434	-	1,190	-	-	-	3,034	-	47,593
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	66	-	-	-	-	-	-	-	-	-	268
-	2,475	46	-	51	-	2,740	-	5,788	13,731	3,312	-	68,517

## 3.2.2.5 Fuel Consumption Table for Power Generation

**Fuel Consumption Table for Power Generation in 2007**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Main Activity Producer	56,661	1,037	32,967	6,410	660,980	8,732	33,181	131,897	44,109
Coal	49,137	-	24,654	2,520	660,037	7,478	18,110	48,517	29,293
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	491	-	-	1,309	-
Blast Furnace Gas	578	-	-	-	453	-	-	3,431	-
Crude Oil & NGL	-	-	-	-	-	-	-	7,761	-
LPG	-	-	-	-	-	-	-	-	-
Refinery Gas	-	-	-	-	-	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Diesel Oil	153	-	1,358	183	-	24	2,676	11,912	4,412
Fuel Oil	-	-	-	-	-	-	-	533	-
Natural Gas	6,355	1,030	6,176	882	-	1,224	4,793	50,517	9,944
Others	439	8	779	2,825	-	6	7,602	7,917	459
Auto Producers	3,033	863	1,954	170	94,423	-	-	23,726	5,363
Coal	-	-	5	6	61,982	-	-	8,757	1,474
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	13	-	3,260	-	-	546	274
Blast Furnace Gas	18	-	13	-	6,463	-	-	2,293	1,850
Crude Oil & NGL	-	-	-	-	165	-	-	-	-
LPG	-	-	-	13	1,796	-	-	953	-
Refinery Gas	-	-	-	-	-	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Diesel Oil	-	-	-	96	6,971	-	-	7,581	664
Fuel Oil	-	-	-	-	62	-	-	101	-
Natural Gas	3,015	863	1,923	37	9,357	-	-	3,315	650
Others	-	-	-	19	4,368	-	-	180	450

**Fuel Consumption Table for Power Generation in 2006**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Main Activity Producer	56,343	1,040	31,089	5,226	602,470	9,053	27,554	120,169	48,533
Coal	50,302	-	23,300	2,483	601,591	6,851	15,092	47,318	32,183
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	367	-	-	1,299	-
Blast Furnace Gas	552	-	-	-	512	-	-	3,223	-
Crude Oil & NGL	-	-	-	-	-	-	-	6,551	-
LPG	-	-	-	-	-	-	-	-	-
Refinery Gas	-	-	-	-	-	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Gas/Diesel Oil	97	-	1,267	31	-	30	2,061	9,642	3,972
Fuel Oil	-	-	-	-	-	-	-	508	-
Natural Gas	4,822	1,040	5,440	2,131	-	2,164	3,752	44,941	11,933
Others	570	-	1,082	582	-	7	6,648	6,686	444
Auto Producers	2,744	891	1,801	244	90,314	-	-	25,148	5,190
Coal	-	-	5	8	55,615	-	-	9,113	1,555
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	16	-	3,532	-	-	591	211
Blast Furnace Gas	15	-	17	-	7,632	-	-	2,361	1,786
Crude Oil & NGL	-	-	-	-	238	-	-	-	-
LPG	-	-	-	18	1,801	-	-	1,084	-
Refinery Gas	-	-	-	-	-	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Gas/Diesel Oil	-	-	-	76	10,872	-	-	8,423	519
Fuel Oil	-	-	-	-	65	-	-	91	-
Natural Gas	2,729	883	1,764	124	5,482	-	-	3,279	747
Others	-	8	-	17	5,077	-	-	207	372



Fuel Consumption Table for Power Generation in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
18,211	39,316	2,496	104	2,040	7,737	250,247	7,694	34,341	26,080	676,116	8,309	2,048,665
6,400	6,795	584	-	242	3,972	51,489	-	23,223	6,850	419,844	3,208	1,362,354
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	25	-	1,824
-	-	-	-	-	-	-	-	-	-	456	-	4,918
-	-	-	-	-	-	-	-	-	-	-	-	7,761
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	148	-	148
199	12,309	-	53	189	900	3,668	1,688	2,583	888	9,095	206	52,494
-	-	-	-	-	-	-	-	-	-	-	-	533
11,298	19,444	1,912	-	1,564	2,720	195,089	5,960	8,414	18,224	159,405	4,713	509,665
314	768	-	51	45	145	-	46	121	118	87,143	182	108,968
1,116	7,465	638	577	193	-	54,226	-	8,877	2,204	18,120	1,020	223,967
-	-	15	-	-	-	19,244	-	6,924	-	2,566	383	101,356
-	-	-	-	-	-	3	-	-	-	-	-	3
-	29	-	-	-	-	1,674	-	86	-	130	-	6,012
-	75	461	-	-	-	3,319	-	368	-	722	-	15,582
-	-	-	-	-	-	702	-	-	-	-	-	867
-	-	-	-	-	-	937	-	35	-	-	-	3,734
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	263	9	-	6,613	-	682	-	253	409	23,541
-	-	-	-	-	-	84	-	-	-	-	-	247
1,032	6,832	162	108	60	-	18,974	-	160	2,204	13,756	203	62,653
83	529	-	206	124	-	2,675	-	622	-	692	25	9,973

Fuel Consumption Table for Power Generation in 2006 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
16,655	40,794	2,831	92	1,606	7,057	253,542	6,861	33,141	24,539	651,905	8,872	1,949,372
5,095	6,812	1,143	-	233	3,714	55,112	-	22,379	4,816	431,426	3,517	1,313,367
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	49	-	1,715
-	-	-	-	-	-	-	-	-	-	495	-	4,782
-	-	-	-	-	-	-	-	-	-	-	-	6,551
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	76	-	76
169	13,376	-	46	276	887	5,885	1,082	2,942	1,903	8,278	398	52,345
-	-	-	-	-	-	-	-	-	-	-	-	508
10,773	19,444	1,683	-	1,043	2,311	192,545	5,649	7,574	17,784	145,009	4,872	484,912
617	1,162	5	46	54	145	-	130	246	35	66,572	85	85,115
1,242	7,403	638	517	142	-	55,291	-	8,806	2,169	18,473	-	221,013
-	-	12	-	-	-	19,599	-	6,739	-	3,377	-	96,023
-	-	-	-	-	-	5	-	-	-	-	-	5
-	21	-	-	-	-	1,775	-	90	-	136	-	6,371
-	86	482	-	-	-	5,120	-	360	-	725	-	18,585
-	-	-	-	-	-	779	-	-	-	-	-	1,016
-	-	-	-	-	-	904	-	39	-	-	-	3,846
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	1	1
-	-	-	210	4	-	7,535	-	810	8	293	-	28,750
-	-	-	-	-	-	111	-	-	-	-	-	267
1,208	7,297	144	111	-	-	17,119	-	163	2,162	13,362	-	56,573
33	-	-	195	138	-	2,344	-	604	-	580	-	9,575

## 3.22.6 Stock Table by Energy Resources

## Stock Table by Energy Resource in 2007

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Opening Stocks</b>									
Hard Coal	-	-	-	-	-	-	2,501	-	-
Coking Coal	-	-	-	-	-	-	-	-	-
Other bituminous coal	-	-	-	-	-	-	-	-	-
Subbituminous Coal	-	-	-	-	-	-	2,501	-	-
Anthracite	-	-	-	-	-	-	-	-	-
Lignite	-	-	-	-	-	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-	-	-	-	-	-	-	-	-
BKB/PB	-	-	-	-	-	-	-	-	-
Crude Oil & NGL	1,961	40	8,802	-	-	-	212	15,491	13,060
Gasoline	756	-	1,889	-	431	-	-721	1,578	543
Naphtha	308	1	392	-	11	-	35	672	299
Jet Fuel	-	-	3	-	11	-	-	-	-
Kerosene	582	0	2,207	-	558	-	683	1,341	-
Gas/Diesel Oil	232	-	512	-	149	-	-778	3,059	1,671
Fuel Oil	199	-	114	-	-	44	105	2,804	1,032
LPG	-	-	-	-	-	-	-	-	-
Other Petroleum Products	652	0	3,154	-	-	-	-	352	264
Natural Gas	-	-	8,225	-	-	-	-	-19	955
Others	-	-	-	-	-	-	-	-	-
<b>Total Opening Stocks</b>	<b>4,691</b>	<b>41</b>	<b>25,298</b>	<b>-</b>	<b>1,160</b>	<b>44</b>	<b>2,037</b>	<b>25,278</b>	<b>17,824</b>
<b>Closing Stocks</b>									
Hard Coal	-	-	-	706	3,705	245	-	-	-
Coking Coal	-	-	-	14	934	-	-	-	-
Other bituminous coal	-	-	-	692	1,433	245	-	-	-
Subbituminous Coal	-	-	-	-	1,338	-	-	-	-
Anthracite	-	-	-	-	1,530	-	-	-	-
Lignite	-	-	-	-	135	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-	-	-	23	4,660	-	-	-	-
BKB/PB	-	-	-	-	15	-	-	-	-
Crude Oil & NGL	1,841	-	9,876	458	5,244	-	-	13,121	12,160
Gasoline	745	2	1,954	243	-	11	-	1,611	557
Naphtha	258	-	412	52	18	343	-	655	436
Jet Fuel	-	-	2	-	-	-	-	-	-
Kerosene	456	-	2,215	-16	-	100	-	1,440	247
Gas/Diesel Oil	163	-	520	-249	-	280	-	2,858	1,470
Fuel Oil	213	0	119	421	46	-	-	2,528	941
LPG	-	-	-	-0	-	-	-	-	-
Other Petroleum Products	753	-	3,727	-11	-	-	-	298	291
Natural Gas	-	-	-	67	-	172	-	-	-
Others	-	-	-	2	-	-	-	-	-
<b>Total Closing Stocks</b>	<b>4,429</b>	<b>2</b>	<b>18,825</b>	<b>1,694</b>	<b>15,352</b>	<b>1,150</b>	<b>-</b>	<b>22,512</b>	<b>16,102</b>
<b>Stock Change</b>									
Hard Coal	-4,998	-	617	-706	-3,705	-245	2,501	-	-199
Coking Coal	-3,993	-	-	-14	-934	-	-	-	-537
Other bituminous coal	-1,281	-	1,893	-692	-1,433	-245	-	-	338
Subbituminous Coal	276	-	-1,275	-	-1,338	-	2,501	-	-
Anthracite	-	-	-	-	-1,530	-	-	-	704
Lignite	-	-	-	-	-135	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-506	-	-	-23	-4,660	-	-	-	-
BKB/PB	139	-	-	-	-15	-	-	-	-
Crude Oil & NGL	120	40	-1,073	-458	-5,244	-	212	2,370	900
Gasoline	12	-2	-65	-243	431	-11	-721	-33	-14
Naphtha	50	1	-20	-52	-7	-343	35	17	-137
Jet Fuel	-	-	1	-	11	-	-	-	-
Kerosene	126	0	-8	16	558	-100	683	-99	-247
Gas/Diesel Oil	69	-	-9	249	149	-280	-778	201	200
Fuel Oil	-14	-0	-5	-421	-46	44	105	276	91
LPG	-	-	-	0	-	-	-	-	-
Other Petroleum Products	-101	0	-573	11	-	-	-	54	-27
Natural Gas	-	-	8,225	-67	-	-172	-	-19	955
Others	-	-	-	-2	-	-	-	-	-
<b>Total Stock Change</b>	<b>-5,103</b>	<b>39</b>	<b>7,090</b>	<b>-1,694</b>	<b>-14,192</b>	<b>-1,106</b>	<b>2,037</b>	<b>2,766</b>	<b>2,226</b>

Stock Table by Energy Resource in 2007 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
1,157	-	-	-	115	-	-633	-	3,633	-	-	-	6,772
-	-	-	-	-	-	-487	-	336	-	-	-	-151
-	-	-	-	115	-	-147	-	2,924	-	-	-	2,892
1,157	-	-	-	-	-	-	-	373	-	-	-	4,031
-	-	-	-	-41	-	-38	-	-	-	-	2,910	2,831
-	-	-	-	-	-	-259	-	-	-	-	-	-259
-	-	-	-	-	-	-26	-	-	-	-	-	-26
-	-	-	-	-3	-	-109	-	12	-	-	-	-100
-	-	-	-	-	-	2	-	-	-	-	-	2
472	3,153	354	28	-	326	37,523	-	4,260	3,714	126,827	-	216,226
165	1,204	190	5	-	-114	2,128	-	1,091	-	21,938	-	31,083
-	168	71	6	-	-	-	-	-	12	4,261	-	6,236
-	-	-	-	-	-	-	-	-	-	-	-	14
192	-	223	30	-	-129	3,733	-	1,167	-	1,623	-	12,210
23	374	132	8	-	156	6,952	-	549	-	10,736	-	23,775
18	92	7	2	-	-3	191	-	245	-	6,453	-	11,304
-	-	-	-	-	-	-	-	-	-	-	-	-
788	100	83	-	-	-3	-	-	-	-	8,923	-	14,312
-	-84	-1	-	-	-	33,841	-	-	-	4,451	-	47,367
-	-	-	-	-	-	-	-	-	-	-	-	-
2,815	5,008	1,059	78	71	234	83,305	-	10,957	3,727	185,212	2,910	371,747
1,049	-	-	-	-	-	-	-	3,779	-	-	-	9,484
-	-	-	-	-	-	-	-	245	-	-	-	1,193
-	-	-	-	-	-	-	-	3,132	-	-	-	5,502
1,049	-	-	-	-	-	-	-	402	-	-	-	2,789
-	-	-	-	-	-	-	-	3	-	-	-	1,533
-	-	-	-	-	-	-	-	-	-	-	-	135
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	20	-	-	-	4,702
-	-	-	-	-	-	-	-	-	-	-	-	15
604	3,387	455	483	55	-	36,825	-	4,030	-	126,218	874	215,631
96	1,556	223	6	514	-	2,501	-	1,057	38	22,962	-	34,074
-	190	72	6	42	-	-	-	-	-	4,019	-	6,503
-	-	-	-	-	-	-	-	-	-	-	-	2
147	112	235	17	537	-	3,806	-	1,012	142	-	-	10,450
23	424	129	2	264	-	6,533	-	506	253	9,985	-	23,161
15	105	6	0	58	-	192	-	247	277	6,203	-	11,371
-	-	-	-	-	-	-	-	-	-	-	-	-0
582	72	81	-	180	-	-	-	-	-	7,516	-	13,486
-	-	-	-	-	-	40,753	-	-	-	-	-	40,992
-	-	-	-	-	-	-	-	-	-	-	-	2
2,515	5,845	1,201	513	1,650	-	90,610	-	10,653	711	176,903	874	371,541
108	-325	-232	-	115	-	-633	-	-146	-	-1,719	-	-9,568
-	-583	60	-	-	-	-487	-	91	-	602	-	-5,795
-	-	-15	-	115	-	-147	-	-208	-	3,477	-	1,802
108	258	-277	-	-	-	-	-	-29	-	-5,799	-	-5,575
-	-	-	-	-41	-	-38	-	-3	-	87	2,910	2,090
-	-	9	-	-	-	-259	-	-	-	265	-	-121
-	-	-	-	-	-	-26	-	-	-	-	-	-26
-	577	-	-	-3	-	-109	-	-8	-	31	-	-4,701
-	-	-	-	-	-	2	-	-	-	-	-	126
-131	-233	-101	-454	-55	326	697	-	230	3,714	609	-874	595
69	-352	-33	-1	-514	-114	-372	-	34	-38	-1,024	-	-2,991
-	-21	-1	-	-42	-	-	-	-	12	242	-	-267
-	-	-	-	-	-	-	-	-	-	-	-	12
45	-112	-12	13	-537	-129	-72	-	155	-142	1,623	-	1,760
-	-50	3	6	-264	156	419	-	44	-253	751	-	614
3	-14	1	1	-58	-3	-1	-	-1	-277	250	-	-68
-	-	-	-	-	-	-	-	-	-	-	-	0
206	29	2	-	-180	-3	-	-	-	-	1,407	-	826
-	-84	-1	-	-	-	-6,912	-	-	-	4,451	-	6,375
-	-	-	-	-	-	-	-	-	-	-	-	-2
300	-585	-365	-435	-1,579	234	-7,305	-	304	3,016	6,972	2,036	-5,345

## 3.22.7 Power Generation Capacity Table

**Power Generation Capacity - Total**

	1980	1985	1990	1995	2000	2005	2006	2007
								MW
Australia	24,141	32,450	35,495	40,017	46,276	50,893	51,303	54,356
Brunei Darussalam	148	268	334	650	763	759	759	759
Canada	81,999	97,019	104,141	115,505	111,324	122,838	123,947	124,720
Chile	2,940	3,967	4,079	5,577	10,372	12,363	13,442	12,207
China	65,869	87,053	137,891	217,225	319,321	508,410	622,000	713,290
Hong Kong, China	3,342	5,580	8,342	10,096	11,568	11,804	12,320	19,733
Indonesia	2,554	5,635	9,275	14,970	20,762	27,664	30,958	31,416
Japan	143,698	169,398	194,730	226,995	258,838	274,558	274,467	275,529
Republic of Korea	9,391	16,137	21,021	32,184	53,693	66,537	70,081	73,373
Malaysia	2,334	4,443	5,582	10,600	13,762	23,626	21,088	22,973
Mexico	14,625	20,807	28,267	35,859	40,519	51,071	53,795	56,253
New Zealand	6,112	7,532	7,176	7,920	8,456	8,884	8,912	9,133
Papua New Guinea	313	491	490	490	543	N.A.	N.A.	N.A.
Peru	3,140	3,682	4,143	4,520	6,070	6,201	6,658	6,658
Philippines	4,478	6,222	6,869	9,696	13,185	15,619	15,803	15,803
Russia	168,200	195,800	213,400	215,000	214,011	N.A.	221,414	223,981
Singapore	2,010	2,571	3,667	4,678	6,610	10,106	10,106	10,606
Chinese Taipei	9,056	15,970	16,883	21,898	27,385	43,146	45,009	45,881
Thailand	3,448	6,705	8,725	14,757	20,802	26,269	26,815	28,285
United States of America	578,600	655,182	733,589	776,333	812,593	1,068,570	1,077,755	1,089,501
Viet Nam	1,185	1,500	2,537	4,499	6,192	11,340	11,823	N.A.

**Power Generation Capacity - Thermal Power**

	1980	1985	1990	1995	2000	2005	2006	2007
								MW
Australia	18,038	25,537	27,174	31,451	37,041	40,863	41,193	42,932
Brunei Darussalam	148	268	334	650	763	759	759	759
Canada	28,363	30,475	31,201	34,269	33,183	36,794	36,264	35,858
Chile	1,470	1,700	1,789	2,246	6,244	6,933	7,953	7,089
China	45,551	60,638	101,845	162,941	237,540	384,130	484,050	554,420
Hong Kong, China	3,342	5,580	8,342	10,096	11,568	11,804	12,320	7,089
Indonesia	2,176	4,540	7,040	12,482	17,386	23,643	26,626	26,844
Japan	98,071	110,161	124,984	141,665	166,648	177,223	175,767	176,339
Republic of Korea	7,647	11,048	11,065	20,475	36,817	45,365	46,666	49,888
Malaysia	1,721	3,121	4,185	8,840	11,708	21,242	18,758	20,611
Mexico	8,483	13,850	19,012	24,457	28,648	38,156	40,634	40,680
New Zealand	1,852	2,668	2,296	2,386	2,809	2,913	2,926	2,971
Papua New Guinea	213	366	335	335	319	N.A.	N.A.	N.A.
Peru	1,273	1,515	1,744	2,053	3,210	2,938	3,395	3,395
Philippines	3,089	3,366	3,661	6,275	8,953	10,393	10,542	10,542
Russia	122,400	137,300	149,700	149,700	148,900	N.A.	151,513	153,335
Singapore	2,010	2,571	3,667	4,678	6,610	10,106	10,106	10,606
Chinese Taipei	6,398	8,337	9,177	12,571	17,819	32,756	34,564	35,277
Thailand	2,178	4,701	6,451	12,019	17,865	20,575	21,023	22,412
United States of America	444,181	485,305	536,667	571,659	610,124	851,750	857,710	863,223
Viet Nam	890	1,000	1,362	1,633	2,900	4,382	7,137	N.A.

**Power Generation Capacity - Hydro Power**

	1980	1985	1990	1995	2000	2005	2006	2007
								MW
Australia	6,103	6,913	8,321	8,564	9,201	9,285	9,285	9,317
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	47,770	55,880	59,381	64,750	67,407	71,978	72,838	73,616
Chile	1,470	2,267	2,290	3,331	4,128	4,812	4,862	4,907
China	20,318	26,415	36,046	52,184	79,352	116,520	128,570	145,260
Hong Kong, China	-	-	-	-	-	-	-	-
Indonesia	378	1,065	2,095	2,180	3,015	3,221	3,532	3,529
Japan	29,776	34,337	37,831	43,455	46,325	47,348	47,357	47,374
Republic of Korea	1,157	2,223	2,340	3,093	3,149	3,883	5,485	5,492
Malaysia	613	1,322	1,397	1,760	2,054	2,091	2,120	2,120
Mexico	5,992	6,532	7,880	9,329	9,634	10,571	10,734	13,143
New Zealand	4,022	4,593	4,619	5,259	5,193	5,345	5,345	5,366
Papua New Guinea	100	125	155	155	224	N.A.	N.A.	N.A.
Peru	1,868	2,166	2,400	2,467	2,860	3,207	3,216	3,216
Philippines	943	1,962	2,153	2,258	2,301	3,222	3,257	3,257
Russia	37,500	41,500	43,400	44,000	43,900	N.A.	46,062	46,804
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	1,386	1,489	1,562	4,183	4,422	4,512	4,512	4,523
Thailand	1,270	2,004	2,274	2,738	2,936	3,476	3,476	3,475
United States of America	81,700	88,900	92,360	100,060	98,881	98,887	99,282	99,770
Viet Nam	250	450	1,176	2,866	3,292	4,155	4,401	N.A.

**Power Generation Capacity - Nuclear Power**

	1980	1985	1990	1995	2000	2005	2006	2007
								MW
Australia	-	-	-	-	-	-	-	-
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	5,866	10,664	13,538	16,393	10,615	13,345	13,345	13,345
Chile	-	-	-	-	-	-	-	-
China	-	-	-	2,100	2,100	6,840	6,850	8,850
Hong Kong, China	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-
Japan	15,689	24,686	31,645	41,356	45,248	48,222	49,580	49,467
Republic of Korea	587	2,866	7,616	8,616	13,716	17,176	17,716	17,716
Malaysia	-	-	-	-	-	-	-	-
Mexico	-	-	675	1,309	1,365	1,365	1,365	1,365
New Zealand	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	N.A.	N.A.	N.A.
Peru	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-
Russia	8,300	17,000	20,300	21,300	21,200	N.A.	23,742	23,742
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	1,272	5,144	5,144	5,144	5,144	5,144	5,144	5,144
Thailand	-	-	-	-	-	-	-	-
United States of America	51,810	79,397	99,643	99,515	97,860	105,585	105,585	105,764
Viet Nam	-	-	-	-	-	-	-	N.A.

**Power Generation Capacity - Others**

	1980	1985	1990	1995	2000	2005	2006	2007
Australia	-	-	-	2	34	745	825	2,107
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	-	-	21	93	119	721	1,500	1,901
Chile	-	-	-	-	-	619	627	211
People's Republic of China	-	-	-	-	329	920	2,530	4,760
Hong Kong, China	-	-	-	-	-	-	-	12,644
Indonesia	-	30	140	308	360	800	800	1,043
Japan	162	214	270	519	617	1,765	1,763	2,349
Republic of Korea	-	-	-	-	11	113	214	277
Malaysia	-	-	-	-	-	293	210	242
Mexico	150	425	700	764	872	979	1,062	1,065
New Zealand	238	271	261	275	454	626	641	796
Papua New Guinea	-	-	-	-	-	N.A.	N.A.	N.A.
Peru	-	-	-	-	1	55	47	47
Philippines	446	894	1,055	1,163	1,931	2,004	2,004	2,004
Russia	-	-	-	-	11	N.A.	97	100
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	-	1,000	1,000	-	-	735	789	936
Thailand	-	-	-	-	1	2,218	2,316	2,398
United States of America	909	1,580	4,919	5,099	5,728	12,348	15,178	20,744
Viet Nam	45	50	-	-	-	2,803	285	N.A.

## Appendices

A. Definition of Products

1. Coal
2. Oil
3. Natural Gas
4. Electricity and Heat
5. New and Renewable Energy

B. Definition of Flows

C. Energy Prices

D. Definition of Columns and Rows of the Energy Balance Table

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## A. Definition of Products

### COAL

Primary coal is a fossil fuel, usually with the physical appearance of a black or brown rock, consisting of carbonised vegetal matter. The higher the carbon content of a coal, the higher its rank or quality is. Coal types are distinguished by their physical and chemical characteristics. These characteristics determine the suitability for various uses. There are three main categories of coal: hard coal, sub-bituminous coal and brown coal (also called lignite). Peat, which is another primary fuel closely related to coal, is often included under coal.

#### 1. Anthracite

High rank coal used for industrial and residential applications. It has generally less than 10% volatile matter and a high carbon content (about 90% fixed carbon). Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis.

#### 2. Coking Coal

Bituminous coal with a quality that allows the production of a coke suitable to support a blast furnace charge. Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis.

#### 3. Bituminous Coal

Coal used for steam raising purposes and includes all bituminous coal that is not included under coking coal nor anthracite. It is characterized by higher volatile matter than anthracite (more than 10%) and lower carbon content (less than 90% fixed carbon). Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis. If bituminous coal is used in coke ovens it should be reported as coking coal.

#### 4. Sub-bituminous Coal

Non-agglomerating coals with a gross calorific value between 17.4 MJ/kg (4,165 kcal/kg) and 23.9 MJ/kg (5,700 kcal/kg) containing more than 31% volatile matter on a dry mineral matter free basis.

#### 5. Lignite

Non-agglomerating coals with a gross calorific value less than 17.4 MJ/kg (4,165 kcal/kg) and greater than 31% volatile matter on a dry mineral matter free basis. Oil shale and tar sands produced and combusted directly should be reported in this category. Oil shale and tar sands used as inputs for other transformation processes should also be reported in this category. This includes the portion of the oil shale or tar sands consumed in the transformation process.

#### 6. Peat

Combustible soft, porous or compressed, fossil sedimentary deposit of plant origin with high water content (up to 90 per cent in the raw state), easily cut, of light to dark brown color. Only peat used for energy purposes should be reported here.

#### 7. Patent Fuel

A composition fuel manufactured from hard coal fines by shaping with the addition of a binding agent. Note that the amount of patent fuel produced can be slightly higher than the amount of coal consumed in the transformation process because of the addition of a binding agent.

#### 8. Coke Oven Coke

Coke comprises Coke Oven Coke and Gas Coke.

- **Coke Oven Coke:** The solid product obtained from carbonization of coal, principally coking coal,

at high temperature, it is low in moisture and volatile matter. Coke oven coke is used mainly in the iron and steel industry acting as energy source and chemical agent. Coke breeze and foundry coke are included in this category. Semi-coke, the solid product obtained from carbonization of coal at low temperature, should be included in this category. Semi-coke is used as a domestic fuel or by the transformation plant itself. This heading also includes coke, coke breeze and semi-coke made from lignite/brown coal.

- **Gas Coke:** A by-product of hard coal used for production of town gas in gas works. Gas Coke is used for heating purposes.

### 9. Coal Tar

Coal tar is a by-product of the coke oven process.

### 10. BKB/PB (Braunkohlenbriketts/Peat Briquettes)

A composition fuel manufactured from lignite/brown coal or peat. The lignite/brown coal or peat is crushed, dried and molded under high pressure into an even-shaped briquette without the addition of binders. German production of lignite dust is included in this category.

### 11. Gas Works Gas

Covers all types of gases including substitute natural gas produced in public utility or private plants, whose main purpose is manufacture, transport and distribution of gas. It includes gas produced by carbonization (including gas produced by coke ovens and transferred to gas works gas) reported under the "production" row, by total gasification with or without enrichment with oil products (LPG, residual fuel oil, etc.), by cracking of natural gas, and by reforming and simple mixing of gases and/or air,

reported under the "from other sources" row. Substitute natural gas is a high calorific value gas, manufactured by chemical conversion of a hydrocarbon fossil fuel. It is chemically and physically interchangeable with natural gas and is usually distributed through the natural gas grid. The main raw materials for manufacture of substitute natural gas are: coal, oil and oil shales. Substitute natural gas is distinguished from other manufactured gases by its high heat value (above 8,000 kcal/m<sup>3</sup>) and by its high methane content (above 85%). Substitute natural gas produced by synthesis from fuels other than coal based should also come under "from other sources". The quantity of fuel should be reported on a gross calorific value.

### 12. Coke Oven Gas

Obtained as a by-product of solid fuel carbonization and gasification operations carried out by coke producers and iron and steel plants which are not connected with gas works and municipal gas plants. The quantity of fuel should be reported on a gross calorific value.

### 13. Blast Furnace Gas

Obtained as a by-product in operating blast furnaces; it is recovered on leaving the furnaces and used partly within the plant and partly in other steel industry processes or in power stations equipped to burn it. The quantity of fuel should be reported on a gross calorific value.

### 14. Oxygen Steel Furnace Gas

Obtained as a by-product of the production of steel in an oxygen furnace; it is recovered on leaving the furnace. The gas is also known as converter gas, LD or BOS gas. The quantity of fuel should be reported on a gross calorific value.

## OIL

### 1. Crude Oil

Crude oil is a mineral oil of natural origin comprising a mixture of hydrocarbons and associated impurities, such as sulphur. It exists in the liquid phase under normal surface temperature and pressure and its physical characteristics (density, viscosity, etc.) are highly variable. This category includes field or lease condensate recovered from associated and non-associated gas where it is commingled with the commercial crude oil stream.

### 2. Natural Gas Liquids (NGL)

NGL are liquid or liquefied hydrocarbons recovered from natural gas in separation facilities or gas processing plants. Natural gas liquids include ethane, propane, butane (normal and iso-), (iso) pentane and pentanes plus (sometimes referred to as natural gasoline or plant condensate).

### 3. Refinery Feedstocks

A refinery feedstock is a processed oil destined for further processing (e.g. straight run fuel oil or vacuum gas oil) excluding blending. With further processing, it will be transformed into one or more components and/or finished products. This definition also covers returns from the petrochemical industry to the refining industry (e.g. pyrolysis gasoline, C<sub>4</sub> fractions, gasoil and fuel oil fractions).

### 4. Additives/Oxygenates

Additives are non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc.):

- **Oxygenates:** such as alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether));
- **Esters** (e.g. rapeseed or dimethylester, etc.);

- **Chemical Compounds** (such as TML, TEL and detergents).

Note: Quantities of ethanol relate only to the quantities destined for fuel use.

### 5. Biofuels

Biofuels such as bio-gasoline and bio-diesel that are blended into gasoline and diesel by the consumer or at a refinery plant.

- **Bio-gasoline:** a gasoline quality liquid fuel produced from biomass or used cooking oils consists of bioethanol, biomethanol, BioETBE and bioMTBE
- **Bio-diesel:** a diesel quality liquid fuel produced from biomass or used cooking oils, consists of biodiesel, bio-dimethylether, fischer tropsh and cold pressed biooil.
- **Bio-ethanol:** ethanol produced from biomass and/or biodegradable fraction of waste;
- **Bio-methanol:** methanol produced from biomass and/or the biodegradable fraction of waste;
- **Bio-dimethylether:** a diesel quality fuel produced from biomass and/or the biodegradable fraction of waste;
- **Bio-oil:** a pyrolysis oil fuel produced from biomass

### 6. Other Hydrocarbons

This category includes synthetic crude oil from tar sands, shale oil, etc., liquids from coal liquefaction, output of liquids from natural gas conversion into gasoline, hydrogen and emulsified oils (e.g. Orimulsion).

Note on the reporting of emulsified oils:

All imports of emulsified oils (e.g. Orimulsion) should be reported as imports of 'Other Hydrocarbons' (cell F8 in Table 1). As these oils do not need further processing

in a refinery, report these quantities as Direct Use (cell F10 in Table 1) and Primary Product Receipts in the 'Bitumen' category in Table 2. Any production of emulsified oils should appear as indigenous production of 'Other Hydrocarbons' (cell F1 in Table 1). Report all quantities in physical weight of the emulsion (i.e. including the water content).

### **7. Refinery Gas (not liquefied)**

Refinery gas includes a mixture of non-condensable gases mainly consisting of hydrogen, methane, ethane and olefins obtained during distillation of crude oil or treatment of oil products (e.g. cracking) in refineries. This also includes gases which are returned from the petrochemical industry.

### **8. Ethane**

A naturally gaseous straight-chain hydrocarbon, (C<sub>2</sub>H<sub>6</sub>) extracted from natural gas and refinery gas streams.

### **9. Liquefied Petroleum Gases (LPG)**

LPG are light paraffinic hydrocarbons derived from the refinery processes, crude oil stabilisation and natural gas processing plants. They consist mainly of propane (C<sub>3</sub>H<sub>8</sub>) and butane (C<sub>4</sub>H<sub>10</sub>) or a combination of the two. They could also include propylene, butylene, isobutene and isobutylene. LPG are normally liquefied under pressure for transportation and storage.

### **10. Naphtha**

Naphtha is a feedstock destined for either the petrochemical industry (e.g. ethylene manufacture or aromatics production). Naphtha comprises material in the 30°C and 210°C distillation range or part of this range. Naphtha imported for blending is reported as an import of naphtha, then shown on the interproduct transfer row, as a negative entry for Naphtha, and a positive entry for the corresponding finished product.

### **11. Motor Gasoline**

Motor gasoline consists of a mixture of light hydrocarbons distilling between 35°C and 215°C. It is

used as a fuel for land based spark ignition engines. Motor gasoline may include additives, oxygenates and octane enhancers, including lead compounds such as TEL (Tetraethyl lead) and TML (tetramethyl lead).

### **12. Aviation Gasoline**

This is motor spirit prepared especially for aviation piston engines, with an octane number suited to the engine, a freezing point of -60°C and a distillation range usually within the limits of 30°C and 180°C.

### **13. Gasoline Type Jet Fuel (Naphtha type Jet Fuel or JP4)**

This includes all light hydrocarbon oils for use in aviation turbine power units, distilling between 100°C and 250°C. They are obtained by blending kerosenes and gasoline or naphtha in such a way that the aromatic content does not exceed 25% in volume, and the vapour pressure is between 13.7kPa and 20.6kPa.

### **14. Kerosene Type Jet Fuel**

This is a distillate used for aviation turbine power units. It has the same distillation characteristics between 150°C and 300°C (generally not above 250°C) and flash point as kerosene. In addition, it has particular specifications (such as freezing point) which are established by the International Air Transport Association (IATA). This category includes kerosene blending components.

### **15. Other Kerosene**

Kerosene comprises refined petroleum distillate and is used in sectors other than aircraft transport. It distils between 150°C and 300°C.

### **16. Gas/Diesel Oil (Distillate Fuel Oil)**

Gas/diesel oil is primarily a medium distillate distilling between 180°C and 380°C, and mainly used for diesel compression ignition (cars, trucks, etc.), usually of low sulphur content.

### **17. Fuel Oil**

This covers all residual (heavy) fuel oils (including those

obtained by blending). Kinematic viscosity is above 10 cSt at 80°C. The flash point is always above 50°C and density is always more than 0.90 kg/l.

### 18. White Spirit and SBP

White Spirit and SBP are defined as refined distillate intermediates with a distillation in the naphtha/kerosene range. They are sub-divided as:

- Industrial Spirit (SBP): Light oils distilling between 30° and 200°C. There are 7 or 8 grades of industrial spirit, depending on the position of the cut in the distillation range. The grades are defined according to the temperature difference between the 5% volume and 90% volume distillation points (which is not more than 60°C).
- White Spirit: Industrial spirit with a flash point above 30°C. The distillation range of white spirit is 135° to 200°C.

### 19. Lubricants

Lubricants are hydrocarbons produced from distillate by product; they are mainly used to reduce friction between bearing surfaces. This category includes all finished grades of lubricating oil, from spindle oil to cylinder oil, and those used in greases, including motor oils and all grades of lubricating oil base stocks.

### 20. Bitumen

Bitumen is a solid, semi-solid or viscous hydrocarbon with a colloidal structure, being brown to black in colour, obtained as a residue in the distillation of crude oil, by vacuum distillation of oil residues from atmospheric distillation. Bitumen is often referred to as asphalt and is

primarily used for construction of roads and for roofing material. This category includes fluidized and cut back bitumen.

### 21. Paraffin Waxes

These are saturated aliphatic hydrocarbons. These waxes are residues extracted when dewaxing lubricant oils. They have a crystalline structure which is more-or-less fine according to the grade. Their main characteristics are as follows: they are colourless, odourless and translucent, with a melting point above 45°C.

### 22. Petroleum Coke

Petroleum coke is a black solid by-product, obtained mainly by cracking and carbonising petroleum derived feedstock, vacuum bottoms, tar and pitches in processes such as delayed coking or fluid coking. It consists mainly of carbon (90 to 95%) and has a low ash content. It is used as a feedstock in coke ovens for the steel industry, for heating purposes, for electrode manufacture and for production of chemicals. The two most important qualities are "green coke" and "calcinated coke". This category also includes "catalyst coke" deposited on the catalyst during refining processes; this coke is not recoverable and is usually burned as refinery fuel.

### 23. Other Products

All products not specifically mentioned above, for example: tar and sulphur. This category also includes aromatics (e.g. BTX or benzene, toluene and xylene) and olefins (e.g. propylene) produced within refineries.

## GAS

### 1. Natural Gas

Natural gas comprises gases, occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both "non-associated" gas originating from fields producing hydrocarbons only in gaseous form, and "associated" gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas). Manufactured gas (produced from municipal or industrial waste, or sewage) should be reported in the Annual Questionnaire on Renewable and Wastes.

- **Associated Gas:** natural gas produced in association with crude oil.
- **Non-Associated Gas:** natural gas originating from fields producing hydrocarbons only in gaseous form.
- **Colliery Gas:** methane produced at coal mines, piped to the surface and consumed at collieries or transmitted by pipeline to consumers.

### 2. LNG

Liquid Natural Gas is produced by liquefaction of natural gas.

## NEW AND RENEWABLE ENERGY

### 1. Fuelwood

Covers purpose-grown energy crops (poplar, willow, etc), a multitude of woody materials generated by an industrial process (wood/paper industry in particular) or provided directly by forestry such as firewood, wood chips, bark, sawdust, shavings, chips, black liquor, etc. The quantity of fuel used should be reported on a net calorific value basis.

### 2. Woodwaste

Yard trash and types of waste typically generated by sawmills, plywood mills, and woodyards associated with the lumber and paper industry, such as wood residue, cutoffs, wood chips, sawdust, wood shavings, bark, wood refuse, wood-fired boiler ash, and plywood or other bonded materials that contain only phenolic-based glues or other glues that are approved specifically by the administrative authority.

### 3. Bagasse

Covers crushed sugar cane or beet refuse from sugar

making.

### 4. Charcoal

Covers the solid residue of the destructive distillation and pyrolysis of wood and other vegetal material.

### 5. Other Biomass

All other solid biomass products not specifically mentioned above. This includes agricultural wastes such as straw, rice husks, nut shells, poultry litter, crushed grape dregs, palm oil bunches, etc. The quantity of fuel used should be reported on a net calorific value basis.

### 6. Biogas

A gas composed principally of methane and carbon dioxide produced by anaerobic digestion of biomass, comprising:

- **Landfill gas:** formed by the digestion of landfilled wastes.
- **Sewage sludge gas:** produced from the anaerobic fermentation of sewage sludge.

- **Other biogas:** such as biogas produced from the anaerobic fermentation of animal slurries and of wastes in abattoirs, breweries and other agro-food industries.

### 7. Industrial Waste

Wastes of industrial non-renewable origin (solids or liquids) combusted directly for the production of electricity and/or heat. The quantity of fuel used should be reported on a net calorific value basis. Renewable industrial waste should be reported in the Solid biomass, Biogas and/or Liquid biofuels categories.

### 8. Municipal solid waste (renewables)

Waste produced by households, industry, hospitals and the tertiary sector that contains non-biodegradable materials that are incinerated at specific installations. The quantity of fuel used should be reported on a net calorific value basis.

### 9. Liquid Biofuels

Biofuels cover bio-ethanol, bio-diesel, bio-methanol, bio-dimethylether, bio-oil. Liquid bio-fuels are mainly bio-diesel and bio-ethanol/ETBE used as transport fuels. They can be made from new and used vegetable oils and may be blended with or replace petroleum-based fuels. The natural plant feedstock includes soya, sunflower and oil seed rape oils. Under some circumstances, used vegetable oils may also be used as feedstock for the process.

### 10. Hydro

Potential and kinetic energy of water converted into electricity in hydroelectric plants. Pumped storage also

included. Detailed plant sizes should be reported net of pumped storage.

### 11. Geothermal

Energy available as heat emitted from within the Earth's crust, usually in the form of hot water or steam. It is exploited at suitable sites:

- **Electricity:** For Electricity generation using dry steam or high enthalpy brine after flashing.
- **Thermal:** Directly as Heat for district heating, agriculture, etc.

### 12. Solar

- **Pothovoltaic:** Solar energy used for electricity generation.
- **Thermal:** Solar energy exploited for hot water production by: Flat plate collectors, mainly of the thermosyphon type, for domestic hot water or for the seasonal heating of swimming pools.

(Note: Passive solar energy for the direct heating, cooling and lighting dwellings or other buildings is not included.)

### 13. Tide/wave/ocean

Mechanical energy derived from tidal movement or wave motion and exploited for electricity generation.

### 14. Wind Energy

Kinetic energy of wind exploited for electricity generation in wind turbines.

## ELECTRICITY AND HEAT

### 1. Thermal

Electricity and heat generation from combustible fuels such as coal, oil and gas.

### 2. Hydro

Power generation from hydro plants, including pumped up (pumped storage) plants.

### 3. Nuclear

Electricity and heat generation from nuclear plants.

### 4. Geothermal

Electricity and heat generation from geothermal plants.

### 5. Renewable Energy

Electricity and heat generation from solar, biomass, and waste and Electricity generation from tide, wave, ocean and wind.

#### ▫ Solar

- **Electricity:** Quantity of electricity generated by solar photovoltaic.
- **Heat:** Solar energy exploited for hot water

production by: Flat plate collectors, mainly of the thermosyphon type, for domestic hot water or for the seasonal heating of swimming pools.

- (Note: Passive solar energy for the direct heating, cooling and lighting dwellings or other buildings is not included.)

- **Tide, Wave, Ocean:** Mechanical energy derived from tidal movement or wave motion and exploited for electricity generation.

- **Wind:** Kinetic energy of wind exploited for electricity generation in wind turbines.

- **Biomass:** Electricity and heat produced by Fuelwood, Woodwaste, Bagasse, Other Biomass, Biogas and Liquid Biofuels.

- **Waste:** Electricity and heat produced by Industrial Waste and Municipal Solid Waste.

### 6. Others

Electricity and heat generation from other fuel sources such as fuel cells etc.



## B. Definition of Flows

### SUPPLY SECTOR

Domestic supply is defined as indigenous production + from other sources + imports - exports - international marine bunkers  $\pm$  stock changes.

#### 1. Production

Production refers to the quantities of fuels and energies extracted or produced, calculated after any operation for removal of inert matter or impurities. Indigenous production refers to production within national boundaries including off shore production. There are a few specificities according to the fuels:

- **Oil:** Production includes only marketable production, and excludes volumes returned to formation. Such production should include all crude oil, NGL, condensates and oil from shale and tar sand, etc. It should also include the receipts of additives/oxygenates by refineries and blending plants from outside the refinery sector.
- **Natural Gas:** All dry marketable production is measured after purification and extraction of NGLs and sulphur. Quantities reinjected, vented or flared, are not included. Production includes quantities used within the natural gas industry; in gas extraction, pipeline systems and processing plants.

Calculation of production of hydro, geothermal, solar, wind, etc and nuclear follows some conventions used by selected international organisations.

As regards the production of secondary energy in the basic energy statistics, production of secondary oil products represents the gross refinery output. Secondary coal products and gases represent the output from coke ovens, gas works, blast furnaces and other transformation processes. In the energy balances production of

secondary products is zero and the gross refinery output is included in the transformation sector.

Production from other sources: Production from other sources refers to both primary energy that has not been accounted for under production and secondary energy that has been accounted for in the production of another fuel. There are a few examples:

- additives and other hydrocarbons produced from coal, gas or renewables;
- oil and coal used in natural gas blending plants to adjust calorific value;
- recovered slurries, middling and other low grade coal products which cannot be classified according to the main categories of coal.

#### 2. Imports and Exports

Quantity of energy that have crossed the national territorial boundaries, whether customs clearance has taken place or not. Quantities of crude oil and products imported or exported under processing agreements (i.e. refining on account) should be included. Crude oil and NGLs should be reported as coming from the country of ultimate origin; refinery feedstocks and finished products should be reported as coming from the country of last consignment. Any gas liquids (e.g. LPG) extracted during the regasification of imported liquefied natural gas should be included as imports. Petroleum products imported or exported directly by the petrochemical industry should be included.

Note: Imports or exports of ethanol (reported in the Additives/Oxygenate column) should relate to the quantities destined for fuel use.

Re-exports of oil imported for processing within bonded

areas should be included as an export of product from the processing country to the final destination.

### 3. International Marine Bunkers

Bunkers cover the quantities of fuels delivered to sea-going ships of all flags. Consumption of warships should be included in Final Consumption under Other Sector, Not Elsewhere Specified. Consumption by ships engaged in fishing and in transport in inland and coastal waters is not included.

### 4. Stock Changes

Stock changes should reflect the difference between opening stock level and closing stock level for stocks held on national territory. A stock build is shown as a negative number, and a stock draw as a positive number.

### 5. Transfers

This refers to products transferred and inter-product transfers. Products transferred are imported petroleum products which are reclassified as feedstocks for further

processing in the refinery, without delivery to final consumers. Inter-product transfers result from reclassification of products either because their specification has changed, or because they are blended into another product. For example, quantities of kerosene may be reclassified as gas oil after blending with the latter in order to meet its winter diesel specification.

### 6. Statistical Difference

This is the difference between calculated and observed gross inland deliveries. National Administrations sometimes obtain the data components of domestic availability from a variety of sources. Owing to differences in concepts, coverage, timing and definitions, observed and calculated gross inland deliveries are often not identical.

## TRANSFORMATION SECTOR

The transformation sector comprises the conversion of primary forms of energy to secondary and further transformation (e.g. coking coal to coke, crude oil to petroleum products, and heavy fuel oil to electricity). The transformation can take place in various plants including: electricity plants, combined heat and power plants, heat plants, blast furnace/gas works, coke/patent fuel/BKB plants, petroleum refineries, petrochemical industry, liquefaction plants, and other plants.

### 1. Electricity Plants

Electricity plants refer to plants which are designed to produce electricity only. If one or more units of the plant is a CHP unit (and the inputs and outputs can not be distinguished on a unit basis) then the whole plant is designated as a CHP plant. Both main activity producer

(formerly known as public) and autoproducer plants are included here. Heat from chemical processes for electricity generation is also included here.

### 2. Combined Heat and Power Plants (CHP)

Combined heat and power plants refers to plants which are designed to produce both heat and electricity (sometimes referred to as co-generation power stations). If possible, fuel inputs and electricity/heat outputs are on a unit basis rather than on a plant basis. However, if data are not available on a unit basis, the convention for defining a CHP plant noted above should be adopted. Both main activity producer (formerly known as public) and autoproducer plants are included here.

### 3. Heat Plants

Heat plants refer to plants (including heat pumps and electric boilers) designed to produce heat only and who sell heat to a third party (e.g. residential, commercial or industrial consumers) under the provisions of a contract. Both main activity producer (formerly known as public) and autoproducer plants are included here. Heat pumps that are operated within the residential sector where the heat is not sold are not considered a transformation process and are not included here •the electricity consumption would appear as residential use.

### 4. Blast Furnaces

Blast furnaces are for the production of pig-iron from iron ore. The transformation component pertains to the fuels used for supporting the blast furnace charge and providing heat and carbon for the reduction of the iron ore. Accounting for the calorific content of the fuels entering the process is a complex matter as transformation (into blast furnace gas) and consumption (heat of combustion) occur simultaneously. Some carbon is also retained in the pig-iron; almost all of this reappears later in the oxygen steel furnace gas (or converter gas) when the pig-iron is converted to steel.

### 5. Gas Works

Gas works plants are for the production of town gas/gas work gas by carbonization (including gas produced by coke ovens and transferred to gas works gas), by total gasification with or without enrichment with oil products (LPG, residual fuel oil, etc.), and by reforming and simple mixing of gases and/or air.

### 6. Coke Ovens

Coke Ovens are facilities for the carbonization of coal, principally coking coal, at high temperature. The transformation process provide for the production of coke and by-products such as coke oven gas and coal tar.

### 7. Patent Fuel Plants

Patent Fuel Plants are for the manufacturing of a composition fuel made of hard coal fines and addition of

a binding agent.

### 8. BKB Plants

BKB (Brown Coal Briquettes) plants are for the manufacturing of a composition fuel made of lignite/brown coal (including dried lignite fines and dust) produced by briquetting under high pressure without the addition of a binding agent. This includes Peat Briquettes Plants which produce a similar composition fuel using peat.

### 9. Petroleum Refineries

Petroleum refineries are industrial plants which convert (transform) crude oil and other hydrocarbons into finished petroleum products.

### 10. Petrochemical Industry

Petrochemical industries are industrial plants the produce raw materials for the manufacturing of plastics, synthetic fibers and rubbers, fertilizers, pesticides, detergents and solvents. Quantities of backflows or petroleum products returned from the petrochemical sector, whether returned to refineries for further processing/blending or used directly. Note: energy use in the petrochemical sector is reported in the Energy Sector, non-energy use is shown in the chemical/petrochemical industrial sector as non-energy.

### 11. Liquefaction Plants

Liquefaction plants include diverse liquefaction processes, such as coal liquefaction plants and gas-to-liquid plants. Coal Liquefaction plants are facilities where coal is used to produce liquid fuels suitable for transportation applications by the removal of carbon or addition of hydrogen, either directly or indirectly.

### 12. Natural Gas Blending Plants

These are plants where the calorific value of natural gas for distribution is adjusted through blending with gases from oil and/or coal.

### 13. Charcoal Production Plants

Charcoal plants are facilities where charcoal, a solid residue, is produced from the destructive distillation and pyrolysis of wood and other vegetable material.

### 14. Other Transformation Plants

Other transformation plants represent other energy transformation processes not already covered by the list of definition.

## ENERGY SECTOR

The Energy sector covers ISIC and NACE Divisions 10, 11, 12, 23 and 40. The Energy sector includes the manufacture of chemical materials for atomic fission and fusion and the products of these processes. Fuels used in the manufacture of fuel briquettes and packaged fuel from coal or lignite and consumption in coke ovens and other transformation industries should also be reported here.

The energy sector is divided into the following sub-sectors: Coal Mines, Patent Fuel Plants, Coke Ovens, Gas Work Plants, Natural Gas Blending Plants, Blast Furnaces, BKB/PB Plants, Petroleum Refineries,

Electricity, CHP and Heat Plants, Liquefaction Plants, Not elsewhere Specified and Distribution Losses.

Fuels used by the energy industry to support the extraction (mining, oil and gas production) or transformation activity are reported in this category. For example: fuel used for heating, lighting, or operating pumps/compressors, or used as inputs fuel into furnaces or ovens. Note that quantities of fuels transformed into another energy form should be reported under the Transformation sector. Consumption used in support of the operation of pipelines (oil, gas and coal slurry) should be reported in the Transport Sector.

## FINAL ENERGY CONSUMPTION SECTOR

The term final consumption (equal to the sum of the consumption in the end-use sectors: industry, transport, residential, commercial/public services, agriculture/forestry, fishing and non specified) implies that energy used for transformation and for own use of the energy producing industries is excluded. Final consumption reflects for the most part deliveries to consumers. It includes consumption for both energy and non-energy purposes.

### 1. Industry Sector

Industry sector covers all industrial undertakings as enumerated below. Sectors included are iron and steel; chemical including petrochemical; non-ferrous metals;

non-metallic mineral products; transport equipment; machinery; mining (excluding energy producing industries) and quarrying; food processing, beverages and tobacco; pulp, paper and printing; wood and wood products (other than pulp and paper); construction; textile and leather; not elsewhere specified.

#### 1.1 Iron and Steel

Covers ISIC Group 271 and Class 2731. Report pulverised coal injection (PCI) into blast furnaces under blast furnaces, Transformation sector. To avoid double counting, fuels used in blast furnaces should be reported in the Transformation sector. (NACE Divisions 27.1, 27.2, 27.3, 27.51, and 27.52).

## 1.2 Chemical including Petrochemical

Refers to ISIC Division 24 (NACE Division 24).

- Includes manufacture of basic chemicals (ISIC 241)
- Other chemical products (ISIC 242), Man-made fibers (ISIC 243)

## 1.3 Non-ferrous Metals

Refers to ISIC Group 272 and Class 2732. (NACE Division 27.4, 27.53 and 27.54).

- Manufacture of precious and non-ferrous metals (ISIC 272)
- Casting of non-ferrous metals (2732)

## 1.4 Non-metallic Minerals Products

Covers ISIC Division 26, i.e.: Glass, ceramic, cement and other building materials industries. (NACE Division 26).

- Manufacture of glass and glass products (ISIC 261)
- Non-metallic mineral products (ISIC 262) such as ceramics, tiles, baked clay products and cement

## 1.5 Transport Equipment

Covers ISIC Division 34 and 35. (NACE Division 34 and 35), i.e.:

- Manufacture of motor vehicles (ISIC 341) bodies for motor vehicles and semi trailers (ISIC 342)
- Parts and accessories for motor vehicles (ISIC 343)
- Shipbuilding and repair (ISIC 345)
- Railway and tramway locomotives (ISIC 352)
- Aircraft and spacecrafts (ISIC 353)
- Transport equipment not elsewhere classified (ISIC 359)

## 1.6 Machinery

Refers to Fabrication of metal products, machinery and equipment other than transport equipment. ISIC Division 28, 29, 30, 31 and 32. (NACE Division 28, 29, 30, 31 and 32)

- Structural metal products (ISIC 281)
- Other fabricated metal products (ISIC 289)
- General purpose machinery (ISIC 291)
- Special purpose machinery (ISIC 292)
- Domestic appliances (ISIC 293)
- Office, accounting and computing machinery (ISIC 300)
- Electric motors, generators and transformers (ISIC 311)
- Electricity distribution and control apparatus (ISIC 312)
- Insulated wire & cable (ISIC 313),
- Accumulators, primary cells and batteries (ISIC 314)
- Electric lamps and lighting equipment (ISIC 315),
- Other electrical equipment (ISIC 319),
- Electric valve, tubes and other conductors (ISIC 321),
- Television and radio transmitters (ISIC 322),
- Television and radio receivers, sound or video recording reproducing apparatus and associated goods (ISIC 323)

## 1.7 Mining (excluding energy producing industries) and Quarrying

Refers to ISIC Divisions 13 and 14. (NACE Divisions 13 and 14), i.e.:

- Mining of iron ores (ISIC 131)
- Mining of non-ferrous metal ores (ISIC 132)
- Quarrying of stone, sand and clay (ISIC 141)
- Mining and quarrying not elsewhere classified (ISIC 142)

## 1.8 Food Processing, Beverages and Tobacco

Refers to ISIC Division 15 and 16. (NACE Divisions 15, 16), i.e.:

- Production, processing and preservation of meat, fish, fruit, vegetables (ISIC 151)
- Manufacture of dairy products (ISIC 152)

- Manufacture of grain mill products, starches and starch products and animal feeds (ISIC 153)
- Manufacture of other food products (ISIC 154)
- Manufacture of beverages (ISIC 155)
- Manufacture of tobacco products (ISIC 160)

### 1.9 Pulp, Paper and Printing

Refers to ISIC Division 21 and 22. (NACE 21, 22)  
Includes production of recorded media.

- Paper and paper products (ISIC 210)
- Publishing (ISIC 221)
- Printing and printing related activities (ISIC 222)
- Reproduction of recorded media (ISIC 223)

### 1.10 Wood and Wood products (other than pulp and paper)

Refers to ISIC Division 20. (NACE Division 20), i.e.:

- Sawmill and planing of wood (ISIC 201)
- Wood products, cork, straw and plaiting materials (ISIC 202)

### 1.11 Construction

Refers to ISIC Division 45. (NACE Division 45), i.e.:

- Site preparation (ISIC 451)
- Building of complete construction (ISIC 452)
- Building installation (ISIC 453)
- Building completion (ISIC 454)
- Renting of construction or demolition equipment (ISIC 455)

### 1.12 Textile and Leather

Refers to ISIC Divisions 17, 18 and 19. (NACE Divisions 17, 18, 19), i.e.:

- Spinning, weaving and finishing of textiles (ISIC 171)
- Manufacture of other textiles (ISIC 172)
- Manufacture of knitted and crocheted fabrics and articles (ISIC 173)
- Manufacture of wearing apparel except fur apparel

(ISIC 181)

- Dressing and dyeing of fur; manufacture of articles of fur (ISIC 182)

### 1.13 Not elsewhere specified

If your country's industrial classification does not correspond to the above ISIC or NACE codes, please estimate the breakdown by industry and include in "Not elsewhere specified" only consumption in sectors which is not covered above. This covers ISIC Division 25, 33, 36 and 37. (NACE Divisions 25, 33, 36 and 37), i.e.:

- Rubber products (ISIC 251)
- Plastic products (ISIC 252)
- Medical appliances and instruments (ISIC 331)
- Optical instruments and photographic equipment (ISIC 332)
- Watches and clocks (ISIC 333), Furniture (ISIC 361)
- Others manufacturing not elsewhere classified (ISIC 369)
- Recycling of metal waste and scrap (ISIC 371)
- Recycling of non-metal waste and scrap (ISIC 372)

## 2. Transport Sector

All transport activities irrespective of the economic sector in which the activity occurs. Refers to ISIC and NACE categories: Divisions 60, 61 and 62.

### 2.1 International Civil Aviation

All aviation activities for international passenger and freight services.

### 2.2 Domestic Air Transport

Refers to domestic aircraft - commercial, private, agricultural, etc.; include oil used for purposes other than flying, e.g. bench-testing of engines. Military use of aviation fuels also should be excluded here.

### 2.3 Road

Transport by road vehicles. It includes agricultural highway use, but excludes motor gasoline used in

stationary engines (included in the Other sector) and diesel oil for non-highway use in tractors (included in Agriculture). Lubricants for use in road vehicles should be included here. Bitumen for use in road surfacing and gas oil used in engines at construction sites should not be included here but should be included in the Industry subsector "Construction" below.

#### 2.4 Rail

Refers to rail traffic, including industrial railways.

#### 2.5 Inland Waterways

Refers to water vessels navigating in inland waterways and coastal shipping. For example: small craft, barges, and those coastal ships which do not travel for international transportation.

#### 2.6 Pipeline Transport

Refers to transport of goods through pipelines.

#### 2.7 Not Elsewhere Specified

Transport activities not included elsewhere.

### 3. Other Sector

Other sector covers commercial and public services, residential, agriculture, fishing and other final consumption not elsewhere classified.

#### 3.1 Commercial and Public Services

These refer to business and offices in the public and private sectors. ISIC Divisions 41, 50, 51, 52, 55, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 80, 85, 90, 91, 92, 93 and 99. (NACE Divisions 50, 51, 52, 41, 55, 63, 64, 65, 66, 67, 70, 71, 72, 74, 75, 80, 85, 90, 91, 92, 93, 99).

#### 3.2 Residential

Refers to all households including "households with employed persons." ISIC Division 95 (NACE Division 95).

#### 3.3 Agriculture

Refers to agriculture, hunting and forestry by ISIC as follows: ISIC Divisions 01 and 02. (NACE 01 and 02)

#### 3.4 Fishing

Refers to aquaculture and fisheries. Includes ocean, coastal and inland fishing. ISIC Division 05 and NACE 05. This class includes: fishing on a commercial basis in ocean, coastal or inland waters; taking of marine and freshwater crustaceans and mollusks; whale catching; hunting of aquatic animals: turtles, sea squirts, tunicates, sea urchins etc. This class also includes: activities of vessels engaged both in fishing, and in processing and preserving of fish; gathering of marine materials: natural pearls, sponges, coral and algae; and service activities incidental to fishing.

#### 3.5 Not elsewhere specified

Report activities not included elsewhere, please specify. This category includes military use.

#### 3.6 Non-energy Use

Refers to use of energy products as raw materials in the different sectors; that is, not consumed as a fuel or transformed into another fuel. Example: In industry, coal used to make methanol or ammonia.

This is further classified into:

- **Chemical (incl. the petrochemical sector):** Non-energy use of coal includes uses as feedstocks to produce fertilizer and as feedstocks for other petrochemical products.
- **Transport Sector:** Non-energy use in all Transport sub sectors.
- **Other Sector:** Non-energy use in Commercial and Public Services, Residential, Agriculture and Not elsewhere specified.

## C. Energy Prices

### ENERGY PRICES

Energy prices are in either local currency units or in US dollars.

#### **Table 1. Import Prices**

These are import prices based on CIF. These prices are obtained by dividing the value by the volume in foreign trade. Value and volume are recorded by customs administrations for each tariff position. Values recorded at the import stage include cost, insurance and freight (CIF) but exclude import duties.

These are import prices of coal and coal products; crude oil, NGL and petroleum products; electricity and other products including biofuels and other renewable energy products.

The average local currency exchange rate to the US dollar and local currency unit are also required in this table.

#### **Table 2. Wholesale Prices**

Table 2 contains wholesale prices. These are the prices that a buyer pays for large volume purchases whether for own consumption or retail. Examples are prices paid by

electricity distribution companies to electricity generators or suppliers.

Prices are either in local currency units or in US Dollars.

#### **Table 3. Consumer Prices**

These are the prices paid by end-use consumers such as motorists buying fuel in filling stations, household electricity bills, coal briquette prices in supermarkets, etc. The prices may also be in local currency units or in US Dollars.

Electricity prices are prices charged to the industrial, commercial, residential rates and rates to other consumers. Commercial sector include the government services and streetlights. Others include agriculture and other sectors not included in industrial, commercial and residential.



## D. Definition of Columns and Rows of the Energy Balance Table

### DEFINITION OF COLUMNS AND ROWS OF THE ENERGY BALANCE TABLE

#### 1. Unit

For the purpose of presenting its energy balances APEC has adopted kcal and Joules.  $10^7$  kcal (41.863 gigajoules) is equivalent to one ton of oil equivalent (toe). This quantity of energy is, within a few percent, equal to the net heat content of 1 ton of crude oil.

#### 2. Conversion (from original to TOE)

The Coordinating Agency has adopted specific factors supplied by the member economies for each flow or use. The balances are expressed in term of "net" heat value. The difference between the "net" and "gross" heat value for each fuel is the latent heat in condensation of the

water vapor produced during combustion of the fuel. For coal and oil, net heat value is 5 percent less than gross, for most forms of natural and manufactured gas the difference is 9-10 percent, while for electricity there is no difference. The use of net heat value is consistent with the practice of the Statistical Offices of the European Communities and the United Nations.

#### 3. Layout

The energy balances are presented in tabular format: columns for the various sources of energy and rows for the different origins and uses.

### COLUMNS

Across the top of the table from left to right, there are thirteen columns with the following headings:

**Column 1:** Coal includes all primary coal, such as anthracite, coking coal, other bituminous coal, sub-bituminous coal, lignite and peat.

**Column 2:** Coal Products includes all fuels derived from coal including patent fuel, coke oven coke, gas coke, briquettes, coal tar, coke oven gas, blast furnace gas and oxygen steel furnace gas.

**Column 3:** Crude Oil comprises crude oil, refinery feedstocks and natural gas liquids. Natural LPG is included in LPG.

**Columns 4 and 4.1 to 4.10:** Petroleum products (Column 4) comprises motor gasoline, naphtha, jet fuel, kerosene, gas/diesel oil, residual fuel oil, LPG, refinery

gas, ethane and other petroleum products such as: aviation gasoline, white spirit, lubricants, bitumen, paraffin waxes and petroleum coke (Columns 4.1 to 4.10). The definitions of these products are in Appendix A.

**Column 5:** Gas includes natural gas and LNG (excluding natural gas liquids).

**Column 6:** Hydro shows the energy content of the electricity produced in hydro power plants. Hydro output includes output from pumped storage plants.

**Column 8:** Nuclear shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33 percent.

**Column 9:** Geothermal, solar, etc shows the primary heat equivalent of the electricity produced in geothermal

plants with an average thermal efficiency of 10 percent, and the energy content of electricity produced in non-thermal power plants such as photovoltaic, wind, tide wave etc.

**Column 10:** Others includes wood, wood waste, black liquor, industrial and municipal waste and biomass (power generation from other fuel sources such as defined in "Others" energy. is included here).

**Column 11:** Electricity shows final consumption and

trade in electricity (which is accounted at the same heat value as electricity in final consumption; i.e. 1 GWh = 0.000086 MTOE).

**Column 12:** Heat includes heat production from public Combined Heat Power plants (CHP), from autoproducer's heat that is sold to a third party (e.g. to a network).

**Column 13:** TOTAL = the total of columns (1) to (12).

## ROWS

The categories on the left hand side of the table have the following functions.

**Row 1:** Indigenous production shows only production of primary energy, i.e. hard coal, lignite, crude oil, NGL's natural gas, hydro and nuclear, geothermal etc. electricity and others.

**Row 2/3:** Imports and exports comprise amounts having crossed the boundaries of the economy whether or not customs clearance has taken place.

**Row 4:** International marine bunkers cover those quantities delivered to sea-going ships of all flags. Consumption by ships and planes engaged in transport in inland and coastal waters is not included.

**Row 5:** Stock changes are treated as follows: a decrease in stocks, shown in the table as a positive number, is added to supply and an increase in stocks, shown as a negative number, is deducted from supply. Producers', importers', energy transformation industries' and large users' stocks are included.

**Row 6:** Total primary energy supply (TPES) are made up of indigenous production (Row1) + imports (Row2) – exports (Row3) – international marine bunkers (Row4)

and ± stock changes (Row5).

**Row 7:** Transfers refer to Interproduct Transfers, Product Transferred, liquid products from Gas Separation and Recycled Products as defined in Appendix 2.

**Row 8:** Main Activity Producer electricity, column 1 to 10 show primary and secondary fuel input to public utilities' plants as negative entries. Gross electricity produced (including power stations' own consumption) appears as a positive quantity in column 11, "Electricity". Transformation losses appear in the "Total", column 13, as a negative number.

**Row 9:** Auto-producers of electricity, columns 1 to 10 show primary and secondary fuel input to electricity generation of auto-producers as negative entries. 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 gross electricity produced appears as a positive quantity in column 12, "Electricity". Transformation losses appear in the "Total", column 13 as a negative number.

**Row 10:** Where there is a production of gas at Gas-to-Liquid Facilities, the treatment is similar to that

for electricity generation, with the quantity produced appearing as a positive figure in column 5 "Natural Gas", input as negative entries in column 1 (coal), 2 (coal products), 4 (petroleum products) and 5 (natural gas input) and conversion losses appearing in the "Total" column.

**Row 11:** The row Petroleum refineries shows the transformation of crude oil, NGL and condensate to petroleum products.

**Row 12:** Coal transformation shows the transformation of coal from primary to secondary fuels and from secondary to tertiary fuels (hard coal to coke, coke to blast furnace gas, brown coal to BKB, etc).

**Row 13:** Other Transformation: contains the energy feedstocks and outputs of petrochemical industry, bio-fuel processing, charcoal processing and other transformation processes that are not classified elsewhere.

**Row 14:** Own use & loss: Own use contains the primary and secondary energy consumed by transformation industries for heating, traction and lighting purposes. These are shown as negative figures. Included here are, for example, the coal mines' own use of energy, energy use in refineries, electricity plants' own consumption (which includes gross electricity consumed for pumped storage), and energy used for oil and gas extraction (which also includes consumption for the pipeline system). Loss include losses in gas distribution, electricity transmission, and coal transport.

**Row 15:** Discrepancy is a category which includes the sum of the unexplained statistical differences for individual fuels.

**Row 16:** Total Final Consumption (TFC) is the sum of consumption by the different end-use sectors. In final consumption, petrochemical feedstocks as well as natural

gas for producing fertilizer are shown under industry sector.

**Row 17:** Consumption of the Industry sector (energy used for transport by industry is not included here but reported under transport).

**Row 18:** The Transport sector includes all fuels for transport, except international marine bunkers. It includes transport in the industry sector and covers road, railway, internal and international air, internal navigation (including small craft, fishing vessels and coastal shipping not included under marine bunkers) and non-specified transport.

**Row 19:** Other sectors cover agriculture, residential, commercial and public services and non-specified consumption.

**Row 20:** Consumption of the Residential and Commercial sectors. Public services also is included here.

**Row 21:** Consumption of the Agriculture sector.

**Row 22:** Other shows non-specified use which may include military use.

**Row 23:** Non-energy use covers use of coal, gas and petroleum products such as white spirit, paraffin waxes, lubricants, bitumen and other products. Petroleum coke is shown as non-energy use only when there is evidence of such use; otherwise it is shown under energy use in industry or other sectors. Feedstocks for the petrochemical industry are accounted for in industry (row 15). This covers all oil including naphtha, except the other petroleum products listed above, and gas used as petrochemical feedstock. Gas used as raw material for chemical products such as methanol and ammonia/urea is also included.

## E. Conversion Factors

### 1. Coal

Coal has separate factors for production, imports, exports, inputs to power plants, coal used in coke ovens, and coal used in industry. Each economy's individual conversion factors are applied.

### 2. Crude Oil

The conversion factors of each economy are applied as shown in the table of conversion factors.

### 3. Petroleum Products

The conversion factors of each economy are applied.

### 4. Gas

To convert the gross heat content of a gas to its net heat content, the following multiplying factors were used:

Natural Gas	0.9
Gas Works Gas	0.9
Coke Oven Gas	0.9
Blast Furnace Gas	1.0

### 5. Electricity

Figures for electricity production, trade, and final consumption are calculated using the energy content of the electricity, i.e. at a rate of 1 TWh = 0.086 MTOE. Hydro-electricity production (excluding pumped storage) and electricity produced by other non-thermal means, (wind, tide, photovoltaic etc) are accounted for similarly using 1 TWh = 0.086 MTOE. However, the primary

energy value ascribed to nuclear power plants is calculated from the gross generation by assuming that only 33% of the primary energy content appears as electricity, i.e. 1 TWh = (0.086/0.33) MTOE. In the case of electricity produced from geothermal heat the primary value is calculated using 1 TWh = (0.086/0.1) MTOE.

### 6. Heat

Information on heat is supplied in net kilocalories.  $10^{10}$  kilocalories = 1 MTOE

### 7. Others

The conversion factors used for other energy, such as wood, wood waste, black liquor etc. are those that are provided by each economy. In cases where the member economies cannot provide a conversion factor, the CA used the following net calorific values:

Fuel Wood and Wood Waste:	3,702 kcal/kg
Bagasse:	1,959 kcal/kg
Charcoal:	6,898 kcal/kg
Industrial Waste:	3,344 kcal/kg
Municipal Solid Waste:	3,344 kcal/kg
Other Biomass:	2,986 kcal/kg



## Average Net Calorific Values of Energy Products in 2006

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Coal</b>									
Coking Coal	6,807		6,060	7,000	5,775			6,559	6,600
Anthracite			6,616		6,565	6,776		6,174	4,876
Other Bituminous Coal	6,138		6,094	7,000	5,073	6,298		6,037	6,286
Sub-bituminous Coal	4,413		4,251		4,675		5,437	5,108	5,082
Lignite	2,224		3,455		3,363				
Peat									
<b>Coal Products</b>									
Patent Fuels								5,429	4,744
Coke Oven Coke	6,126		6,542	7,000	6,800			6,835	6,500
Coal Tar				10,400	8,000				
Coal Briquettes	5,015				4,170		4,513		
<b>Crude Oil and NGL</b>									
Crude Oil	10,349	10,631	10,220	10,861	10,000		9,828	10,140	10,200
Natural Gas Liquids	10,846		10,800				9,828	11,205	10,200
Refinery Feedstocks	10,338		10,150					10,463	10,700
Additives/Oxygenates	6,000		6,000						1,680
Other Hydrocarbons			10,000						10,000
<b>Petroleum Products</b>									
Refinery Gas	11,500	11,443	11,500	5,046	11,000			10,515	11,500
Ethane	11,300		11,300						11,300
LPG	11,300	10,899	11,300	12,100	12,000	10,878	9,848	11,392	11,300
Naptha	10,750		10,750	11,500	9,176	10,540	10,492	10,461	10,750
Motor Gasoline	10,700	10,357	10,700	11,200	10,300	10,217	10,492	10,654	10,700
Bio-ethanol	6,400		6,400						6,400
Aviation Gasoline	10,700		10,700	11,400			10,602		10,700
Gasoline Type Jet Fuel	10,700		10,700		10,300				10,700
Kerosene Type Jet Fuel	10,650	10,441	10,650	11,100	10,300	10,314	9,401	10,632	10,650
Other Kerosene	10,450	10,441	10,450	11,100	10,300	10,314	9,461	10,232	10,450
Gas/Diesel Oil	10,350	10,389	10,350	10,900	10,200	10,150	10,296	10,284	10,350
Bio-diesel	10,350		10,350						10,350
Fuel Oil	9,600	10,157	9,600	10,500	10,000	9,912	9,034	10,520	9,600
White Spirit SBP	9,600		9,600		9,176				9,600
Lubricants	9,600	10,218	9,600		9,176			10,228	9,600
Bitumen	9,600	10,027	9,600		9,176				9,600
Paraffin Wax	9,600		9,600		9,176				9,600
Petroleum Coke	7,400		7,400	7,000	9,176			8,079	7,400
Other Products	9,600		9,600		9,176		11,511	9,600	9,600
<b>Natural Gas</b>									
Natural Gas	8,640	9,299	8,224	9,341	9,310	8,927	8,116	8,383	8,960
<b>New and Renewables</b>									
Fuel wood and Wood waste	3,701		3,701	3,500				3,702	3,701
Bagasse	1,958		1,958						1,958
Charcoal	6,897		6,897					6,898	6,897
Other Biomass	3,701		3,701				3,702		3,701
Biogas									
Industrial Waste	3,343		3,343		7,000			3,344	3,343
Municipal Solid Waste	3,343		3,343					3,344	3,343
Liquid Biofuels	6,386		6,386						6,386

Note: The Net Calorific Values are used to convert the unit of each product to tons of oil equivalent (toe). 1 toe = 10<sup>7</sup> kcal

Average Net Calorific Values of Energy Products in 2006 (continued)

kcal/kg (kcal/m <sup>3</sup> for Natural Gas)											
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam
	5,609	7,184				5,450		7,386		6,688	5,600
				7,001		5,450		6,745	7,500	6,612	5,600
	5,609	6,731		7,288		5,450		6,201	6,300	6,364	
5,985	4,635	5,023			5,278			5,605		4,635	
	3,368	3,439				3,800		3,957	2,500	3,391	2,000
						2,380					
								3,610		5,985	
	6,334			6,404		6,930	6,438	6,650	6,600	6,561	
						4,200			6,300		
10,311	10,536	10,080	10,120	10,210	9,671	10,050	10,709	10,442	10,089	10,300	10,180
8,574	10,189	10,903	10,120	10,208	9,671	10,010			10,089	11,155	
10,349		10,010								10,525	
	5,608	6,000								3,815	
10,349		10,000		10,111						12,182	
10,149	11,500	11,500	10,515	11,524		11,500	11,500	14,996		11,500	
	11,300	11,300								11,300	
10,877	11,300	11,300	11,393	11,295	10,632	11,300	11,923	11,893	11,669	11,300	10,880
	10,750	10,750	10,500		10,213	10,750	11,923	10,924		10,750	10,750
10,500	10,700	10,700	10,654	10,704	9,785	10,700	11,174	10,494	10,223	10,700	10,500
	6,400	6,400			5,637					6,400	
10,316	10,700	10,700			10,165	10,700		10,669	11,566	10,700	
	10,700	10,700						10,485	11,566	10,700	
	10,650	10,650	10,632	10,655	10,118	10,650	12,425	10,038	11,566	10,650	10,320
10,150	10,450	10,450	10,233	10,482	9,928	10,450	11,140	10,600	11,566	10,450	10,320
10,150	10,350	10,350	10,284	10,341	9,614	10,350	10,957	10,546	10,018	10,350	10,150
	10,350	10,350			8,609					10,350	
9,912	9,600	9,600	10,520	9,600	9,605	9,553	9,839	9,609	10,011	9,600	9,910
	9,600	9,600				9,600				9,600	
	9,600	9,600	10,240		9,120	9,600		9,600		9,600	
	9,600	9,600			9,120	9,600		10,000		9,600	
	9,600	9,600				9,600				9,600	
	7,400	7,400	8,078			7,400		8,200		7,400	
10,150	9,600	9,600	9,602	9,537	9,671	9,600	10,320	12,496	9,940	9,600	9,600
8,385	8,564	7,989	8,113	8,258	8,225	8,076	8,385	9,900	8,218	8,234	9,000
	3,701	3,701		3,428	3,455	3,701		3,039	3,820	3,701	
	1,958	1,958		1,430	4,042	1,958			1,800	1,958	
	6,897	6,897		6,174	6,313	6,897			6,900	6,897	
	3,701	3,701			3,161	3,701			3,235	3,701	3,304
								3,690			
	3,343	3,343				3,343				3,343	
	3,343	3,343				3,343	3,344	2,092	1,160	3,343	
	6,386	6,386			6,296	6,386			7,557	6,386	