



Asia-Pacific  
Economic Cooperation

# APEC

## ENERGY STATISTICS 2010

ENERGY WORKING GROUP  
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COORDINATING AGENCY:  
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## PREFACE

The APEC Energy Statistics 2010 consists of the following chapters:

1. Explanation of the APEC Energy Statistics
2. Overview of the APEC Energy Situation
3. Member Economy 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 of each member economy. The annual tables contain Energy Balance Tables for 2010 and 2009 and Energy Prices for 2010. 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 1990 to 2010. The objective is to report the most recently updated data.

APEC Energy Statistics 2010 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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## TABLE OF CONTENTS

1 BACKGROUND INFORMATION ON THE APEC ENERGY STATISTICS.....	1
1.1 Energy Data .....	2
1.1.1 Original Data .....	2
1.2 Standardization .....	5
1.2.1 Conversion Factors for Fossil Energy from Physical to Thermal Units.....	5
1.2.2 Conversion Factors for Primary Electricity .....	5
1.3 Secondary Data.....	6
1.3.1 Energy Balance Table .....	6
1.3.2 Other Tables.....	6
1.4 Notes on Member Economies.....	7
1.4.1 General Notes .....	7
1.4.2 Specific Notes.....	7
1.5 Socioeconomic Data .....	8
1.6 APEC Energy Database .....	8
2 OVERVIEW OF THE APEC ENERGY SITUATION .....	9
2.1 Overall Notes .....	10
2.2 APEC and the World.....	10
2.3 Energy Supply in APEC .....	11
2.3.1 Total Primary Energy Supply.....	11
2.3.2 Indigenous Production .....	12
2.3.3 Net Import by Region .....	13
2.4 Energy Consumption in APEC .....	13
2.4.1 Total Final Energy Consumption by Sector .....	13
2.4.2 Final Energy Consumption by Energy .....	14
2.4.3 Final Consumption per Capita .....	14
2.5 Power Generation .....	14
2.5.1 Power Generation Output .....	14
2.5.2 Fossil Fuel Consumption for Thermal Power .....	15
2.6 Energy Balance Table .....	16
2.7 CO <sub>2</sub> Emissions.....	16
3 MEMBER TABLES .....	17
3.1 Australia.....	17
3.2 Brunei Darussalam.....	23
3.3 Canada.....	29
3.4 Chile .....	35
3.5 China.....	41
3.6 Hong Kong, China.....	47

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3.7 Indonesia.....	53
3.8 Japan.....	59
3.9 Republic of Korea.....	65
3.10 Malaysia.....	71
3.11 Mexico.....	77
3.12 New Zealand.....	83
3.13 Papua New Guinea.....	89
3.14 Peru.....	95
3.15 Philippines.....	101
3.16 Russia.....	107
3.17 Singapore.....	113
3.18 Chinese Taipei.....	119
3.19 Thailand.....	125
3.20 United States of America.....	131
3.21 Viet Nam.....	137
3.22 APEC Region.....	143
3.22.1 Primary Energy Supply Table.....	144
3.22.2 Final Energy Consumption Table.....	146
3.22.3 Demand and Supply Table.....	148
3.22.4 Power Generation Table.....	152
3.22.5 Fuel Consumption Table for Power Generation.....	154
3.22.6 Stock Table by Energy Resources.....	156
3.22.7 Power Generation Capacity Table.....	158
APPENDICES.....	161
A. Definition of Products.....	163
Coal.....	163
Oil.....	165
Gas.....	168
New and Renewable Energy.....	168
Electricity and Heat.....	170
B. Definition of Flows.....	171
C. Energy Prices.....	178
D. Definition of Columns and Rows of the Energy Balance Table.....	179
E. Conversion Factors.....	183

# 1 Background Information on the APEC

## Energy Statistics

The APEC Energy Statistics consist of energy data submitted by each member economy as well as socio-economic data collected by EDMC (The Energy Data and Modelling Center), 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, 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. also downloads the revised questionnaires from IEA’s Energy Data Center. 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. This is to reduce the reporting burden of these economies to IEA, APEC and other international energy organizations.

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

<p><b>Coal</b></p> <ul style="list-style-type: none"> <li>Coking Coal</li> <li>Other bituminous coal</li> <li>Sub-bituminous Coal</li> <li>Anthracite</li> <li>Lignite</li> <li>Peat</li> </ul> <p><b>Coal Products</b></p> <ul style="list-style-type: none"> <li>Coke Oven Coke</li> <li>Coke Oven Gas</li> <li>Blast furnace Gas</li> <li>Oxygen Steel furnace Gas</li> <li>Patent Fuel</li> <li>Coal Tar</li> <li>BKB/PB</li> <li>Gas Works Gas</li> </ul> <p><b>Crude Oil &amp; NGL</b></p> <ul style="list-style-type: none"> <li>Crude Oil</li> <li>Natural Gas Liquids</li> <li>Refinery Feedstocks</li> <li>Additives / Oxygenates</li> <li>Other Hydrocarbons</li> </ul> <p><b>Gas</b></p> <ul style="list-style-type: none"> <li>Natural Gas</li> <li>LNG</li> </ul>	<p><b>Crude Oil &amp; NGL</b></p> <ul style="list-style-type: none"> <li>Crude Oil</li> <li>Natural Gas Liquids</li> <li>Refinery Feedstocks</li> <li>Additives / Oxygenates</li> <li>Other Hydrocarbons</li> </ul> <p><b>Petroleum Products</b></p> <ul style="list-style-type: none"> <li>Gasoline</li> <li>Motor Gasoline</li> <li>Aviation Gasoline</li> <li>Naphtha</li> <li>Jet Fuel</li> <li>Gasoline Type Jet Fuel</li> <li>Kerosene Type Jet Fuel</li> <li>Kerosene</li> <li>Gas/Diesel Oil</li> <li>Fuel Oil</li> <li>LPG</li> <li>Refinery Gas (not liq.)</li> <li>Ethane</li> <li>White Spirit SBP</li> <li>Lubricants</li> <li>Bitumen</li> <li>Paraffin Waxes</li> <li>Petroleum Coke</li> <li>Other Products</li> </ul>	<p><b>Hydro</b></p> <p><b>Nuclear</b></p> <p><b>New and Renewable Energy</b></p> <ul style="list-style-type: none"> <li>Geothermal</li> <li>Photovoltaic</li> <li>Tide, Wave and Ocean</li> <li>Wind</li> <li>Geothermal Heat</li> <li>Solar Heat</li> <li>Fuel Wood and Woodwaste</li> <li>Bagasse</li> <li>Charcoal</li> <li>Other Biomass</li> <li>Biogas</li> <li>Industrial Waste</li> <li>Municipal Solid Waste</li> <li>Liquid Bio-fuels</li> </ul> <p><b>Electricity</b></p> <p><b>Heat</b></p>
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## b. Collection Schedule and Actual Dates of Submission

The C.A. set the deadline for submission to end of December 2011. In principle, all twenty-one APEC members are expected to submit annual data to the C.A. on the aforementioned deadline. Indonesia, New Zealand, Philippines and Chinese Taipei were able to submit the 5 energy questionnaires by the deadline. Three non-OECD APEC economies submitted after December 2010. Peru, Thailand and Vietnam did not submit the questionnaires.

For Peru, the C.A. downloaded the energy balance data from the website of the Ministry of Mines and Energy of Peru. Thailand submitted its energy balance publication while Viet Nam provided its energy balance table. For these 3 economies, the C.A. filled-out the data in the questionnaires. Papua New Guinea and Singapore were also not able to provide annual energy data using the questionnaires. 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

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

As of June 30, 2012, 17 APEC economies have submitted data to the C.A., one economy less than the 18 that submitted last year. There was no submission from Peru. Fortunately, the C.A. 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 production as part of its monthly Joint Organisations Data Initiative (JODI) Oil submission, 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, 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 JODI. The C.A. will highly appreciate if Singapore does the estimation of the data and submit the data 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 economy, 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 differences. These are as follows:

- 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 and aviation 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. 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.

#### b. Papua New Guinea

C.A. estimated energy balance tables from 2000 to 2010 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.

#### c. Peru

Peru used to submit the annual data using the APEC format. However, the economy was not able to submit the 2010 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.

#### d. 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 1990 to 2010.

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.).

### 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 and nominal dollars as well as real PPP (Purchasing Power Parity) values.

### 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:

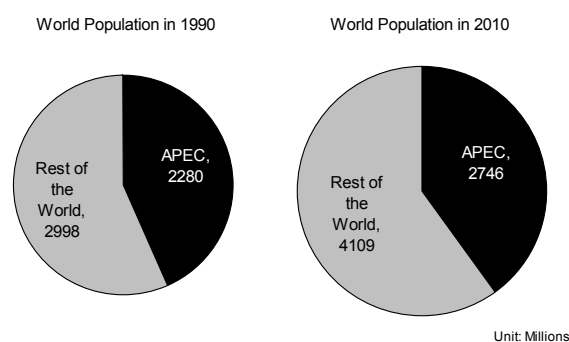
Chile, Mexico and Peru

From 2004, APEC collected the member economies' annual energy data using a 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 APEC and the World

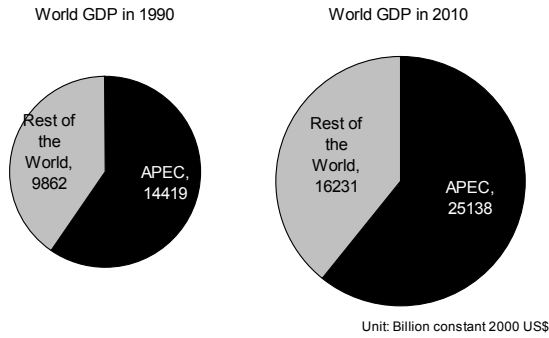
APEC population grew at an average annual rate of 0.9% from 1990 to 2.7 billion in 2010. On the other hand, that of the rest of the world grew by 1.6% per year from 3.0 billion to 4.1 billion during the same period. In view of this, APEC's share of the total population decreased to 40.1% in 2010 from 43.3% in 1990.

APEC's share of the world GDP (constant 2000 in US\$) increased from 59.4% in 1990 to 60.8% in 2010. The average growth rate of GDP in APEC from 1990 to 2010 is 2.8% per annum.



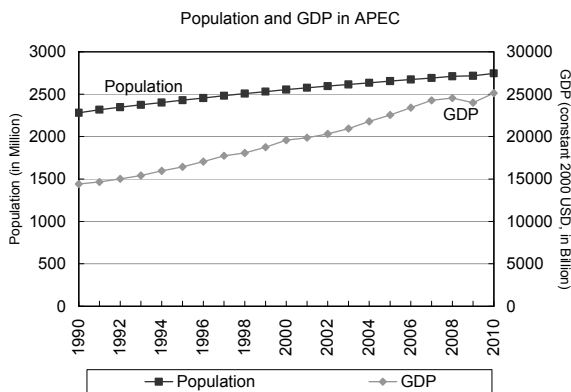
Source: World Bank

Population in 1990 and 2010

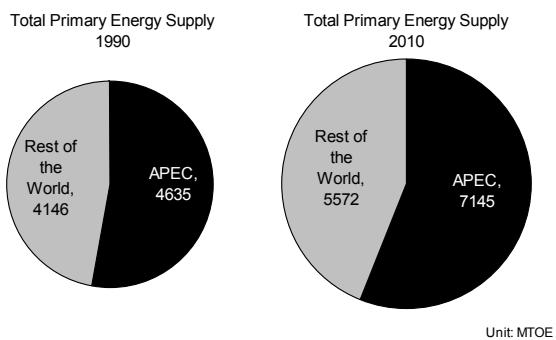


Source: World Bank

GDP in 1990 and 2010



In 1990, APEC's share in the world total primary energy supply was 52.8% (4,635 Mtoe). This increased to 56.2% (7,145 Mtoe) in 2010 and could be attributed to the faster economic growth in the region relative to the rest of the world.



Source: APEC, IEA

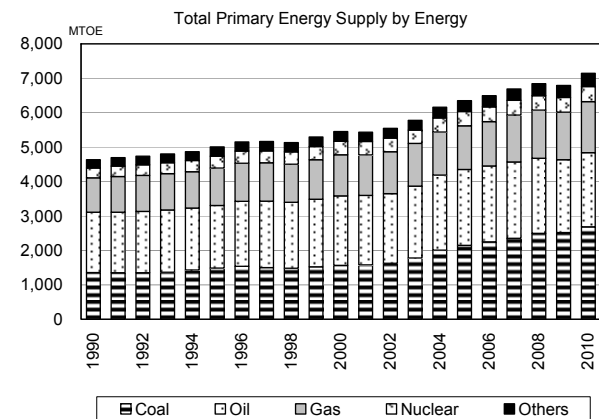
Total Primary Energy Supply in 1990 and 2010

## 2.3 Energy Supply in APEC

### 2.3.1 Total Primary Energy Supply

The level of primary energy supply in 2010 of 7,143 Mtoe increased by 5.2% from the 2009 level of 6,787 Mtoe. In the period 1990 to 2010, primary energy supply had an average growth rate of 2.2% per annum.

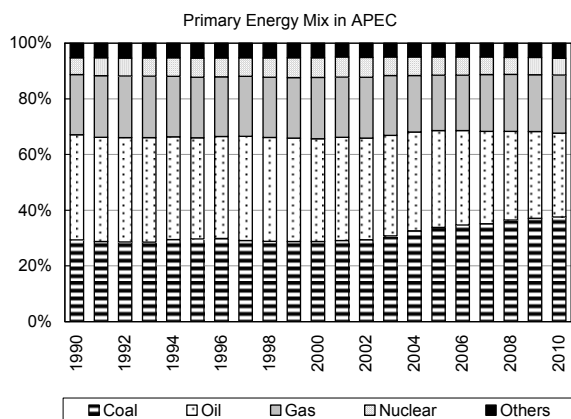
During the same period, coal supply rose at an average rate of 3.5% per annum to reach 2,687 Mtoe. Oil supply rose at an average rate of 1.0% per annum to reach 2,150 Mtoe, increased by 1.7% from 2009. Gas supply increased by 2.0% per annum to reach 1,483 Mtoe. The supply of nuclear grew by 2.1% per annum to reach 433 Mtoe. Other energy, which includes hydro and other renewable energy, grew by 2.4% per annum although their total remained small at 389 Mtoe.



### - Primary Energy Mix

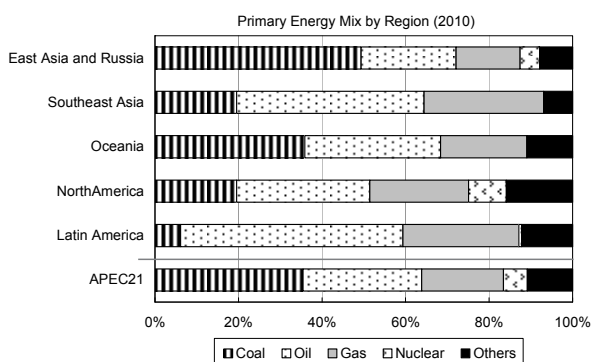
The APEC primary energy mix has changed over time from 1990 to 2010. The share of coal, which was 29.3% in 1990, increased to 37.6% in 2010. In contrast, the share of oil decreased to 30.1% in 2010 from 37.8% in 1990. The share of nuclear energy in 2010 is 6.1% in 2010, which is the same share in 1990.





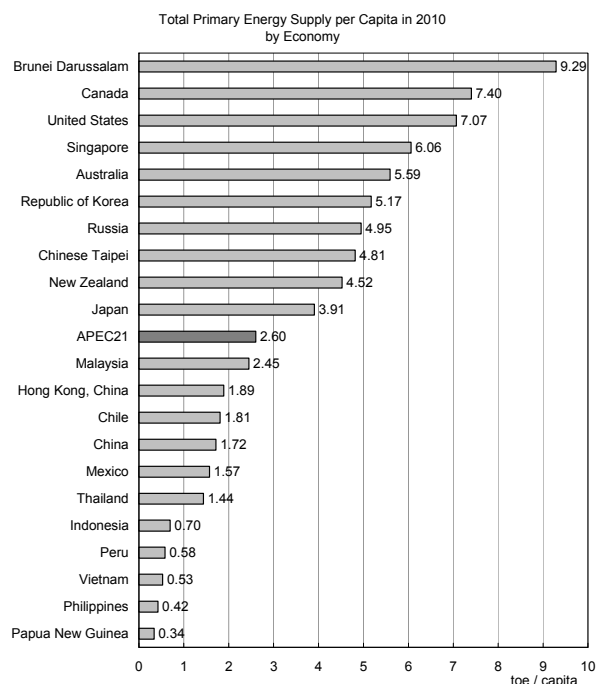
- Primary Energy Mix by region

In East Asia and Russia, the share of coal was 51.8%, higher than other regions. On the other hand, oil was the main energy source in Southeast Asia (44.9%) and Latin America (53.5%). The share of nuclear energy in North America was higher than other regions, at 9.9% in 2010.



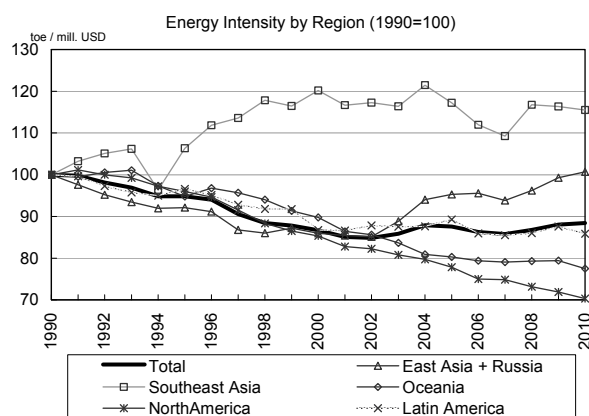
- Total Primary Energy Supply per Capita

The average primary energy supply per capita in APEC region was 2.60 toe per capita in 2010. OECD member economies have higher than average values. In contrast, several Southeast Asian and Latin American economies have lower values.



- Energy Intensity

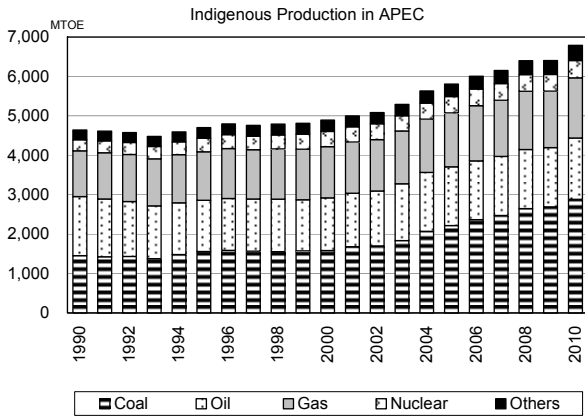
The energy intensity (*Total Primary Energy Supply / GDP in constant 2000 USD*) was 284.1 toe/mill USD in 2010, a 0.6% decrease per annum from 1990. From 1990 to 2010, energy intensity increased in Southeast Asia from 406.2 to 469.2 toe/mill USD (0.7% per annum from 1990) but has decreased in rest of the regions.



2.3.2 Indigenous Production

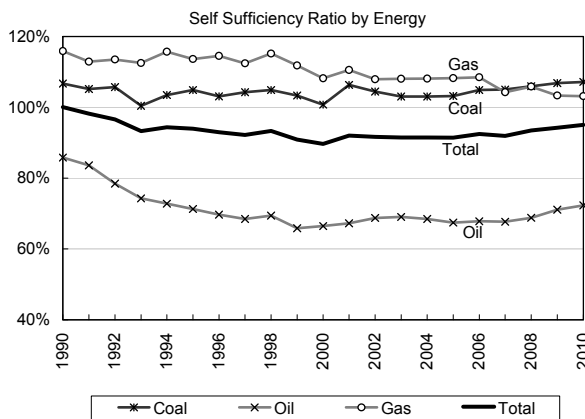
Indigenous energy production in 2010 of 6,788 Mtoe increased by 6.1% from the 2009 level of 6,396 Mtoe. In

the period of 1990 to 2010, indigenous production had an average growth rate of 1.9% per annum.



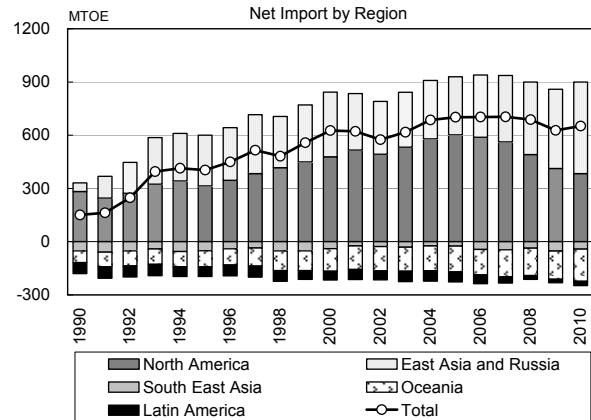
- Self Sufficiency

The self sufficiency ratio (*Indigenous Production / Total Primary Energy Supply*) of the APEC region was 100.1% in 1990 but has decreased to 95.0% in 2010. Self sufficiency ratios in coal and gas are over 100%. Self sufficiency ratio in oil is only 72.3% in 2010 decreasing from 85.8% in 1990.



2.3.3 Net Import by Region

Net import (*import – export*) in the APEC region was 652 Mtoe in 2010, increasing by 7.6% per annum from 1990. In North American region as well as in East Asia and Russia region, net imports were positive. In Southeast Asia, Oceania and Latin America, net import was negative.

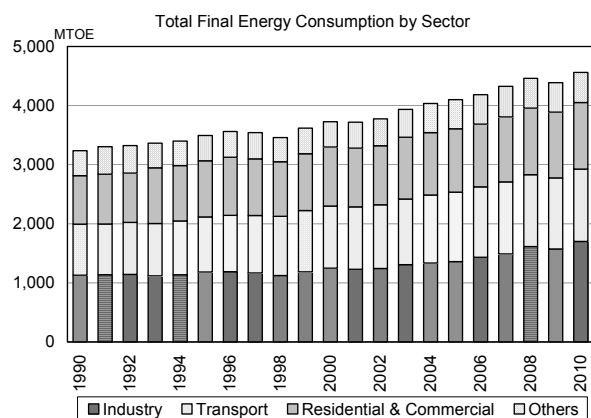


2.4 Energy Consumption in APEC

2.4.1 Total Final Energy Consumption by Sector

The level of final energy consumption in 2010 of 4,562 Mtoe increased by 4.0% from the 2009 level of 4,385 Mtoe. The growth rate was 1.7% per annum from 3,236 Mtoe in 1990.

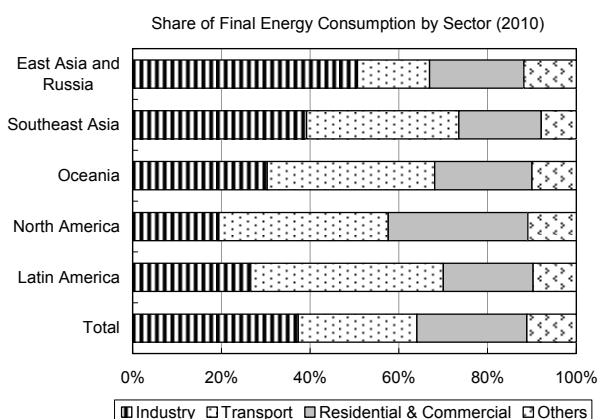
Consumption in industry sector of 1,694 Mtoe was the largest for all sectors in 2010 with a share of 37.1% to the total final consumption. The transport sector share was 26.8% while the residential/commercial sector share was 24.8%.



The final energy consumption of the residential/commercial and other sectors increased by 1.5%, from 1,114 Mtoe in 2008 to 1,130 Mtoe in 2010. The transport sector consumption also increased by 1.8% from 1,200 Mtoe in 2009 to 1,224 Mtoe in 2010. Industrial sector

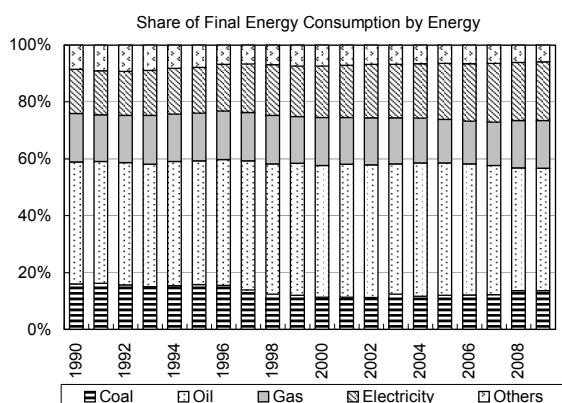
consumption increased by 2.0% per annum from 1,131 Mtoe in 1990 to 1,694 Mtoe in 2010.

In East Asia and Russia region, consumption in industry sector of 1,193 Mtoe was the largest for all sectors in 2010 with a share of 50.5% to the total final consumption. In North American region, industry share was only 19.4% while the transport sector took the highest share of 38.2% in 2010.



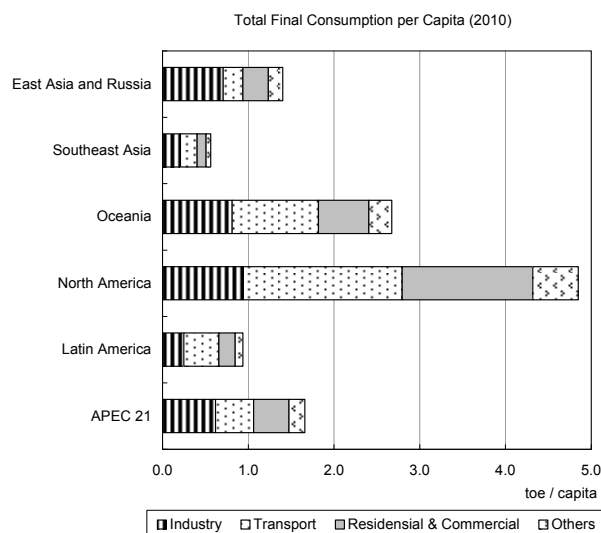
### 2.4.2 Final Energy Consumption by Energy

In 2010, oil share in the final energy consumption was 42.5% (1,940 Mtoe). Electricity share was 21.3% (973 Mtoe) increasing from 15.5% (502 Mtoe) in 1990 .



### 2.4.3 Final Consumption per Capita

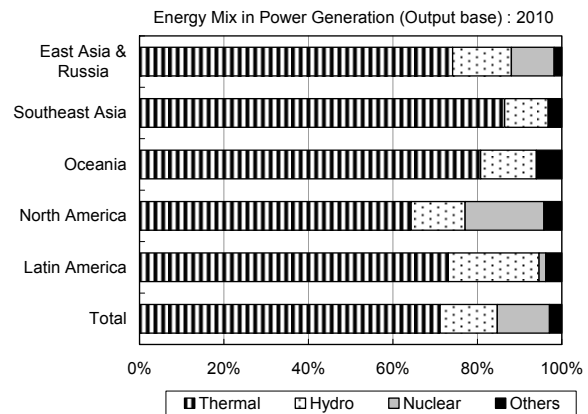
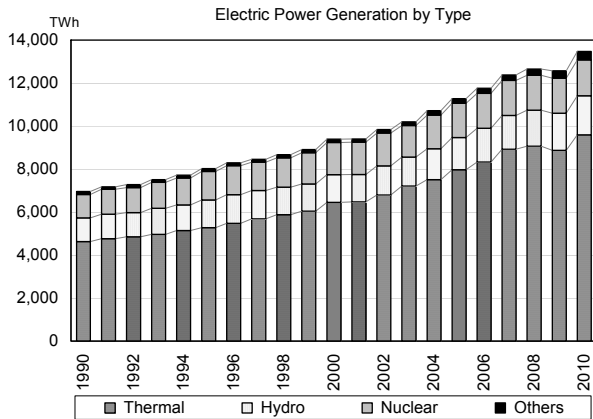
Total final consumption per capita was 1.66 toe in 2010. In Southeast Asia, final energy consumption per capita is 0.56 toe per capita. the lowest in APEC. In Oceania and North American, final energy consumption per capita were higher; 2.67 toe per capita in Oceania and 4.85 toe per capita in North America.



### 2.5 Power Generation

#### 2.5.1 Power Generation Output

Power generation increased by 7.2% from 12,566 TWh in 2009 to 13,470 TWh in 2010. From 1990 to 2010, power generation grew at an average rate of 3.4% per annum (from 6,962 TWh). Thermal power generation increased by 3.7% from 8,871 TWh in 2009 to 9,592 TWh in 2010. The share of thermal power generation decreased to 71.2% of the total in 2010 from 66.5% in 1990. Nuclear power generation increased by 2.1%, from 1,629 TWh in 2009 to 1,662 TWh in 2010. Hydropower generation rose by 2.5% from 1,727 TWh in 2009 to 1,820 TWh in 2010.



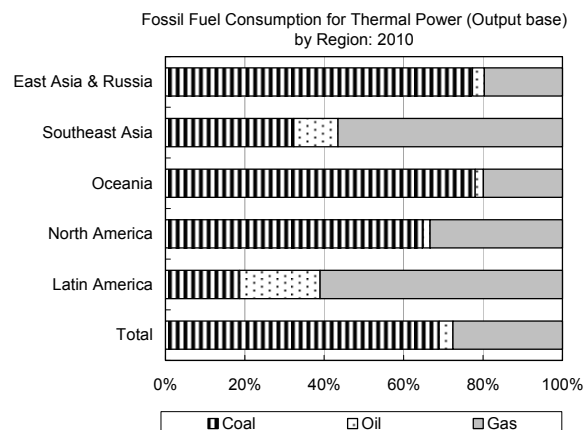
- Power Generation Mix by Region

In APEC region, 71.2% are from thermal generation (coal, oil and natural gas), 13.5% by hydro and 12.3% by nuclear energy in 2010.

In East Asia and Russia region, the share of thermal energy is 74.1%, while that of nuclear energy was 10.1%. In Southeast Asia and Oceania, more than 80% of electricity was generated from thermal sources and there are no nuclear power generation. In North America, 18.6% are generated by nuclear energy. In Latin America, the share of hydro of 21.5% was higher than the APEC average of 13.5% in 2010.

2.5.2 Fossil Fuel Consumption for Thermal Power

In 2010, 69.0% of electricity was generated by coal, 3.5% by oil and 27.6% by natural gas. In Southeast Asia and Latin America, gas was the largest energy source for thermal power generation.



APEC Region	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	2,880	-	1,554	-	1,530	157	433	63	171	-	-	6,788
2 Import	378	9	1,331	470	306	-	-	-	1	8	-	2,503
3 Export	-489	-6	-523	-471	-351	-	-	-	-2	-9	-	-1,851
4 International Marine Bunkers	-	-	-	-130	-	-	-	-	-	-	-	-130
5 International Aviation Bunkers	-	-	-	-60	-	-	-	-	-	-	-	-60
6 Stock Change	-74	-11	-18	-3	-1	-	-	-	-0	-	-	-108
7 Total Primary Energy Supply	2,695	-7	2,344	-194	1,483	157	433	63	170	-1	-	7,143
8 Main Activity Producer	-1,475	-6	-4	-68	-515	-153	-433	-59	-35	1,070	106	-1,573
9 Autoproducer	-158	-32	-1	-29	-117	-3	-	-1	-28	88	126	-154
10 Gas Processing	-8	-1	-	-3	-14	-	-	-	-	-	-	-26
11 Petroleum Refineries	-	-	-2,274	2,315	-	-	-	-	-	-	-	41
12 Coal Transformation	-395	194	-	-1	-0	-	-	-	-	-	-	-202
13 Other Transformation	-	-	33	-47	-7	-	-	-0	-29	-	-	-49
14 Loss & Own Use	-61	-15	-13	-108	-137	-0	-	-0	-0	-185	-44	-563
15 Discrepancy	-41	-4	-1	-22	-0	0	-0	-0	3	1	-1	-66
16 Total Final Energy Consumption	557	128	12	1,927	692	-	-	3	82	973	188	4,562
17 Industry Sector	467	121	2	271	256	-	-	0	49	433	94	1,694
18 Transport Sector	3	0	0	1,139	64	-	-	-	-	17	-	1,224
19 Other Sector	87	7	1	229	313	-	-	3	33	522	94	1,288
19.1 Residential & Commercial	66	7	1	149	309	-	-	3	32	475	88	1,130
19.2 Agriculture	10	0	0	47	1	-	-	0	1	13	3	75
19.3 Other	11	0	0	33	2	-	-	-	0	35	2	83
20 Non-energy	-	-	9	288	58	-	-	-	-	-	-	356

## 2.6 Energy Balance Table

This section presents the 2010 aggregate energy 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.

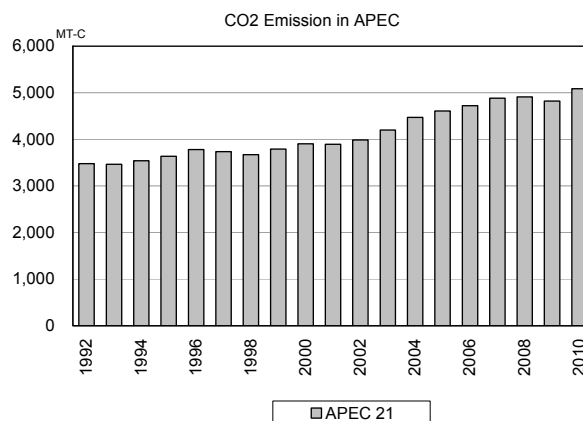
Some of the salient points on the table are:

- 60.6% of coal is used for power generation.
- 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 4.1% of final consumption.
- Oil and Petroleum Products accounted for 42.2% of total final energy consumption, followed in order, by electricity (21.3%), gas (15.2%), and coal (15.0%).

## 2.7 CO<sub>2</sub> Emissions

The CO<sub>2</sub> emission data for 2010 were collected from 6 member economies, namely: Brunei Darussalam; Chile;

Japan; Mexico; Chinese Taipei and Peru. 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 increased by 5.4% from 4,824 Mt-C in 2009 to 5,086 Mt-C in 2010, or 2.2% per annum from 3,307 Mt-C in 1990.



## 3 Member Tables

### 3.1 Australia

## Energy Balance Table of Australia

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	237,339	-	23,752	-	-	-	-	-	-
Import	-	9	22,321	15,806	3,024	-	1,826	-	7,387
Export	-190,144	-	-15,150	-2,436	-195	-	-61	-	-161
International Marine Bunkers	-	-	-	-705	-	-	-	-	-68
International Aviation Bunkers	-	-	-	-3,406	-	-	-3,406	-	-
Stock Changes	4,233	-64	-432	116	48	-14	36	3	116
<b>Total Primary Energy Supply</b>	<b>51,427</b>	<b>-55</b>	<b>30,491</b>	<b>9,376</b>	<b>2,877</b>	<b>-14</b>	<b>-1,604</b>	<b>3</b>	<b>7,274</b>
Transfers	-	-	-818	4,071	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-48,313</b>	<b>1,622</b>	<b>-31,976</b>	<b>30,990</b>	<b>13,595</b>	<b>165</b>	<b>4,523</b>	<b>29</b>	<b>9,323</b>
Main Activity Producer	-44,951	-28	-	-299	-	-	-	-	-181
Autoproducers	-	-32	-	-556	-	-	-	-	-539
Gas Processing	-	-	-	-9	-	-	-	-	-
Petroleum Refineries	-	-	-32,254	31,869	13,595	165	4,523	29	10,044
Coal Transformation	-3,361	1,682	-	-15	-	-	-	-	-
Other Transformation	-	-	279	-	-	-	-	-	-
Loss & Own Use	-	-676	-76	-2,839	-	-	-	-	-1,524
Discrepancy	-987	21	2,393	-3,098	-2,007	-151	-761	-14	-503
<b>Total Final Energy Consumption</b>	<b>2,127</b>	<b>912</b>	<b>13</b>	<b>38,500</b>	<b>14,466</b>	<b>-</b>	<b>2,158</b>	<b>17</b>	<b>14,571</b>
<b>Industry Sector</b>	<b>1,991</b>	<b>893</b>	<b>13</b>	<b>3,551</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>2,256</b>
Iron and Steel	14	695	-	23	-	-	-	-	21
Chemical & Petrochemical	139	41	-	198	-	-	-	2	128
Non-metallic Minerals	581	9	-	424	-	-	-	1	42
Other Industries	1,257	148	13	2,907	3	-	-	1	2,065
<b>Transport Sector</b>	<b>123</b>	<b>-</b>	<b>-</b>	<b>27,893</b>	<b>14,343</b>	<b>-</b>	<b>2,158</b>	<b>-</b>	<b>9,958</b>
Domestic Air Transport	-	-	-	2,217	60	-	2,158	-	-
Road	-	-	-	23,984	14,284	-	-	-	8,428
Rail	-	-	-	833	-	-	-	-	829
Inland Waterways	123	-	-	684	-	-	-	-	529
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	174	-	-	-	-	172
<b>Other Sector</b>	<b>13</b>	<b>19</b>	<b>-</b>	<b>2,854</b>	<b>119</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>2,357</b>
Residential	-	1	-	279	-	-	-	-	26
Commerce and Public Services	13	18	-	616	-	-	-	7	533
Agriculture	-	-	-	1,958	119	-	-	1	1,797
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,202</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	225,706	-	25,020	-	-	-	-	-	-
Import	-	4	19,876	15,565	3,182	-	1,705	-	7,081
Export	-169,045	-	-13,911	-2,544	-231	-	-89	-	-307
International Marine Bunkers	-	-	-	-877	-	-	-	-	-64
International Aviation Bunkers	-	-	-	-3,119	-	-	-3,119	-	-
Stock Changes	-4,200	-135	41	-297	-44	-19	-37	3	-236
<b>Total Primary Energy Supply</b>	<b>52,462</b>	<b>-132</b>	<b>31,026</b>	<b>8,728</b>	<b>2,907</b>	<b>-19</b>	<b>-1,540</b>	<b>3</b>	<b>6,473</b>
Transfers	-	-	-391	3,884	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-49,323</b>	<b>1,450</b>	<b>-32,850</b>	<b>32,118</b>	<b>13,743</b>	<b>262</b>	<b>4,645</b>	<b>59</b>	<b>9,693</b>
Main Activity Producer	-46,415	-32	-	-442	-	-	-	-	-307
Autoproducers	-	-23	-	-526	-	-	-	-	-508
Gas Processing	-	-	-	-13	-	-	-	-	-
Petroleum Refineries	-	-	-33,084	33,116	13,743	262	4,645	59	10,508
Coal Transformation	-2,908	1,506	-	-17	-	-	-	-	-
Other Transformation	-	-	234	-	-	-	-	-	-
Loss & Own Use	-	-509	-51	-2,706	-	-	-1	-	-1,445
Discrepancy	-906	3	2,282	-4,119	-2,008	-244	-1,018	-45	-788
<b>Total Final Energy Consumption</b>	<b>2,232</b>	<b>813</b>	<b>16</b>	<b>37,904</b>	<b>14,643</b>	<b>-</b>	<b>2,085</b>	<b>17</b>	<b>13,934</b>
<b>Industry Sector</b>	<b>2,091</b>	<b>793</b>	<b>16</b>	<b>3,228</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>2,000</b>
Iron and Steel	10	582	-	23	1	-	-	-	19
Chemical & Petrochemical	139	45	-	197	-	-	-	2	118
Non-metallic Minerals	568	13	-	380	-	-	-	1	37
Other Industries	1,373	154	16	2,630	4	-	-	1	1,826
<b>Transport Sector</b>	<b>127</b>	<b>-</b>	<b>-</b>	<b>27,756</b>	<b>14,530</b>	<b>-</b>	<b>2,085</b>	<b>-</b>	<b>9,616</b>
Domestic Air Transport	-	-	-	2,158	72	-	2,085	-	-
Road	-	-	-	24,090	14,457	-	-	-	8,257
Rail	-	-	-	766	-	-	-	-	762
Inland Waterways	127	-	-	576	-	-	-	-	433
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	165	-	-	-	-	164
<b>Other Sector</b>	<b>15</b>	<b>20</b>	<b>-</b>	<b>2,808</b>	<b>108</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>2,317</b>
Residential	-	1	-	284	-	-	-	-	26
Commerce and Public Services	15	19	-	613	-	-	-	7	529
Agriculture	-	-	-	1,911	108	-	-	1	1,761
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,113</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	42,531	1,077	-	679	5,239	-	-	310,617
1,644	621	-	-	1,304	4,852	-	-	-	-	-	-	42,988
-105	-1,717	-	-	-198	-20,893	-	-	-	-	-	-	-228,623
-637	-	-	-	-	-	-	-	-	-	-	-	-705
-	-	-	-	-	-	-	-	-	-	-	-	-3,406
68	-21	-	-	-120	-	-	-	-	-	-	-	3,853
971	-1,117	-	-	986	26,491	1,077	-	679	5,239	-	-	124,725
-	2,029	-	382	1,660	-	-	-	-	-	-	-	3,253
725	712	818	-	1,099	-8,734	-1,077	-	-437	-2,056	20,776	-	-39,203
-118	-	-	-	-	-7,125	-1,077	-	-413	-456	19,926	-	-34,423
-16	-	-	-	-	-1,271	-	-	-24	-1,336	850	-	-2,368
-	-9	-	-	-	-262	-	-	-	-	-	-	-271
875	721	818	-	1,099	-	-	-	-	-	-	-	-386
-15	-	-	-	-	-76	-	-	-	-	-	-	-1,770
-	-	-	-	-	-	-	-	-	-263	-	-	15
-41	-18	-765	-28	-462	-10,831	-18	-	-	-	-3,471	-	-17,894
-739	566	0	-0	510	6,228	-	-	-0	0	0	-	4,557
917	2,173	53	354	3,792	13,153	-	-	242	3,184	17,305	-	75,436
759	237	53	-	239	7,726	-	-	-	1,790	6,443	-	22,408
-	1	-	-	-	497	-	-	-	-	321	-	1,550
10	5	53	-	-	1,687	-	-	-	182	414	-	2,662
11	131	-	-	239	1,327	-	-	-	21	393	-	2,755
738	100	-	-	-	4,214	-	-	-	1,587	5,315	-	15,441
155	1,276	-	-	3	431	-	-	-	-	327	-	28,775
-	-	-	-	-	-	-	-	-	-	-	-	2,217
-	1,273	-	-	-	50	-	-	-	-	-	-	24,034
-	1	-	-	3	-	-	-	-	-	199	-	1,033
155	-	-	-	-	-	-	-	-	-	-	-	807
-	-	-	-	-	362	-	-	-	-	0	-	363
-	2	-	-	-	19	-	-	-	-	128	-	321
3	367	-	-	-	4,152	-	-	242	1,394	10,535	-	19,208
-	253	-	-	-	3,102	-	-	233	1,370	5,173	-	10,159
3	73	-	-	-	1,048	-	-	9	23	5,162	-	6,889
-	41	-	-	-	3	-	-	-	-	199	-	2,160
-	-	-	-	-	-	-	-	-	-	-	-	-
-	293	-	354	3,550	844	-	-	-	-	-	-	5,046
-	-	-	-	-	39,327	950	-	538	5,537	-	-	297,079
1,624	555	-	-	1,418	5,557	-	-	-	-	-	-	41,001
-182	-1,547	-	-	-187	-18,020	-	-	-	-	-	-	-203,520
-813	-	-	-	-	-	-	-	-	-	-	-	-877
-	-	-	-	-	-	-	-	-	-	-	-	-3,119
-3	16	-	-	22	-	-	-	-	-	-	-	-4,591
626	-976	-	-	1,254	26,864	950	-	538	5,537	-	-	125,973
-	2,138	-	391	1,355	-	-	-	-	-	-	-	3,492
736	866	744	-	1,370	-8,292	-950	-	-341	-2,383	21,020	-	-39,551
-134	-	-	-	-	-6,644	-950	-	-328	-459	20,156	-	-35,114
-18	-	-	-	-	-1,316	-	-	-13	-1,710	864	-	-2,725
-	-13	-	-	-	-264	-	-	-	-	-	-	-277
906	878	744	-	1,370	-	-	-	-	-	-	-	32
-17	-	-	-	-	-68	-	-	-	-	-	-	-1,488
-	-	-	-	-	-	-	-	-	-214	-	-	20
-61	-13	-684	-37	-467	-9,969	-	-	-	-	-3,564	-	-16,799
-434	247	0	-0	171	4,130	-	-	-	-0	-	-	1,390
866	2,263	61	354	3,682	12,733	-	-	197	3,154	17,456	-	74,505
720	218	61	-	219	7,529	-	-	-	1,737	6,553	-	21,947
-	1	-	-	-	388	-	-	-	-	293	-	1,296
10	6	61	-	-	1,493	-	-	-	129	406	-	2,409
11	112	-	-	219	1,261	-	-	-	26	380	-	2,628
699	99	-	-	-	4,386	-	-	-	1,582	5,474	-	15,615
142	1,379	-	-	3	426	-	-	-	-	354	-	28,662
-	-	-	-	-	-	-	-	-	-	-	-	2,158
-	1,376	-	-	-	48	-	-	-	-	-	-	24,139
-	1	-	-	3	-	-	-	-	-	227	-	993
142	-	-	-	-	-	-	-	-	-	-	-	703
-	-	-	-	-	354	-	-	-	-	0	-	354
-	1	-	-	-	24	-	-	-	-	127	-	316
3	373	-	-	-	4,058	-	-	197	1,417	10,549	-	19,064
-	257	-	-	-	3,040	-	-	190	1,393	5,131	-	10,038
3	74	-	-	-	1,016	-	-	7	24	5,221	-	6,915
-	41	-	-	-	3	-	-	-	-	197	-	2,111
-	-	-	-	-	-	-	-	-	-	-	-	-
-	294	-	354	3,460	720	-	-	-	-	-	-	4,833



## Major Energy Indicators of Australia

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	86,847	107,966	114,252	116,051	119,771	124,245	125,973	124,725
Indigenous Production	158,144	233,412	266,069	273,349	287,805	286,374	297,079	310,617
Import	14,398	26,382	31,109	33,108	36,744	40,444	41,001	42,988
Export	-78,900	-153,518	-179,756	-179,210	-192,219	-196,506	-203,520	-228,623
Final Energy Consumption	56,459	69,566	72,127	73,008	74,914	76,197	74,505	75,436
Industry	19,121	23,777	22,116	22,118	22,943	23,291	21,947	22,408
Transport	21,111	25,658	27,167	27,859	28,358	29,052	28,662	28,775
Residential	7,490	9,061	9,287	9,396	9,766	9,876	10,038	10,159
Commerce & Public Services	3,481	5,041	6,230	6,315	6,643	6,728	6,915	6,889
Others	5,256	6,029	7,326	7,320	7,202	7,250	6,944	7,206
<b>Coal, Coal Products</b>								
Primary Energy Supply	34,980	48,156	51,982	52,830	53,141	52,540	52,330	51,372
Indigenous Production	106,103	164,578	202,762	210,617	220,345	218,895	225,706	237,339
Import	-	-	13	31	27	4	4	9
Export	-67,248	-121,425	-150,990	-150,777	-158,859	-163,964	-169,045	-190,144
Transformation Sector	-30,398	-43,637	-46,646	-47,541	-48,157	-47,395	-47,873	-46,690
Power Generation	-28,773	-42,200	-45,100	-46,025	-46,449	-45,817	-46,470	-45,011
Final Energy Consumption	4,204	4,115	3,344	3,252	3,308	3,459	3,045	3,039
Industry	3,993	3,979	3,141	3,084	3,139	3,287	2,884	2,884
Transport	72	88	131	113	121	131	127	123
Residential	12	2	3	3	3	2	1	1
Commerce & Public Services	126	45	69	53	45	39	34	30
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	33,074	36,577	33,672	32,117	32,920	31,909	31,026	30,491
Indigenous Production	29,026	33,910	25,370	23,167	25,866	23,817	25,020	23,752
Import	10,210	22,314	21,377	20,002	20,740	21,339	19,876	22,321
Export	-5,856	-19,365	-13,188	-10,928	-13,399	-13,426	-13,911	-15,150
Transformation Sector	-30,676	-37,538	-34,075	-32,350	-33,440	-32,562	-32,850	-31,976
Petroleum Refineries	-30,676	-37,538	-34,086	-32,403	-33,551	-32,723	-33,084	-32,254
<b>Petroleum Products</b>								
Primary Energy Supply	-1,873	-2,425	3,044	4,489	3,885	7,415	8,728	9,376
Import	4,188	4,068	9,719	11,959	10,986	14,386	15,565	15,806
Export	-3,447	-3,463	-3,195	-3,438	-3,201	-3,122	-2,544	-2,436
Transformation Sector	31,064	37,687	33,574	30,888	31,709	31,957	32,118	30,990
Power Generation	-946	-525	-769	-828	-782	-1,095	-968	-855
Petroleum Refineries	32,061	38,258	34,399	31,772	32,535	33,089	33,116	31,869
Final Energy Consumption	28,995	34,714	36,467	37,203	37,614	38,665	37,904	38,500
Industry	2,885	3,548	3,063	3,033	3,032	3,395	3,228	3,551
Transport	20,874	25,064	26,313	27,043	27,506	28,167	27,756	27,893
Residential	378	350	293	263	318	345	284	279
Commerce & Public Services	256	313	487	561	576	595	613	616
Others	4,602	5,440	6,310	6,303	6,181	6,163	6,024	6,160
<b>Natural Gas</b>								
Primary Energy Supply	15,344	19,095	18,972	19,851	22,847	25,224	26,864	26,491
Indigenous Production	17,693	28,360	31,355	32,804	34,616	36,504	39,327	42,531
Import	-	-	-	1,114	4,991	4,715	5,557	4,852
Export	-2,350	-9,265	-12,383	-14,067	-16,760	-15,995	-18,020	-20,893
Transformation Sector	-4,092	-4,428	-5,775	-5,543	-7,547	-8,254	-8,292	-8,734
Power Generation	-3,471	-4,061	-5,381	-5,137	-7,201	-7,902	-7,960	-8,396
Final Energy Consumption	8,810	11,459	12,853	12,793	13,274	13,286	12,733	13,153
Industry	5,666	7,165	7,873	7,804	8,232	8,109	7,529	7,726
Transport	10	304	427	385	399	407	426	431
Residential	1,934	2,564	2,778	2,865	2,908	2,952	3,040	3,102
Commerce & Public Services	750	1,083	965	936	934	948	1,016	1,048
Others	450	342	810	803	801	870	723	847
<b>Electricity</b>								
Power Generation	13,332	18,079	19,664	20,023	20,912	20,917	21,020	20,776
Thermal	11,343	15,938	16,257	16,477	17,391	17,268	17,559	17,471
Hydro	1,280	1,438	1,343	1,378	1,248	1,037	950	1,077
Nuclear	-	-	-	-	-	-	-	-
Others	709	703	2,064	2,168	2,272	2,612	2,510	2,229
Final Energy Consumption	11,112	14,856	16,283	16,575	17,343	17,412	17,456	17,305
Industry	5,090	6,624	6,377	6,515	6,795	6,734	6,553	6,443
Transport	155	201	297	317	331	347	354	327
Residential	3,315	4,194	4,717	4,788	4,935	4,996	5,131	5,173
Commerce & Public Services	2,348	3,590	4,685	4,740	5,061	5,119	5,221	5,162
Others	204	248	206	215	220	217	197	199

## Major Economic Indicators of Australia

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	17.07	19.15	20.39	20.70	21.07	21.50	21.95	22.30
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	275.70	384.86	452.03	465.96	482.57	501.06	508.32	519.79
Real Term (Billions of 2000 Price and 2000 PPP)	362.56	506.10	594.44	612.76	634.60	658.91	668.46	683.54
Nominal (Billions of Current USD)	318.60	384.86	707.50	754.11	913.45	994.60	978.98	1,178.52
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	16,156	20,094	22,164	22,512	22,900	23,307	23,156	23,310
Real Term (2000 Price and 2000 PPP)	21,246	26,424	29,147	29,605	30,115	30,649	30,451	30,654
Nominal (Current USD)	18,670	20,094	34,690	36,434	43,348	46,264	44,597	52,851
Nominal GDP & its Components (Billions of Current AUD) *1								
Gross Domestic Product	408.14	663.81	926.45	1,001.44	1,091.63	1,185.74	1,255.24	1,284.78
Household Final Consumption Expenditure, etc.	227.70	387.38	537.44	566.23	608.60	656.19	672.04	698.21
General Government Final Consumption Expenditure	68.97	116.76	160.74	171.40	186.88	201.62	220.87	233.89
Gross Fixed Capital Formation	111.29	170.10	248.26	279.36	305.72	346.67	355.32	359.73
Stock Change	5.04	3.15	3.31	-0.19	3.95	6.12	-0.60	0.12
Exports of Goods and Services	61.05	128.14	167.10	195.68	214.96	233.06	284.44	254.13
Imports of Goods and Services	69.21	141.72	190.39	211.03	228.47	257.91	276.82	258.11
Real GDP & its Components (Billions of 2000 AUD) *1								
Gross Domestic Product	680.83	950.37	1,116.25	1,150.64	1,191.66	1,237.32	1,255.24	1,283.57
Household Final Consumption Expenditure, etc.	355.00	489.39	596.68	613.66	640.24	670.47	672.04	686.32
General Government Final Consumption Expenditure	125.06	168.81	195.94	200.75	208.25	214.89	220.87	224.69
Gross Fixed Capital Formation	142.54	211.63	278.52	302.91	319.29	352.45	355.32	363.82
Stock Change	7.38	2.23	4.39	1.48	4.32	4.34	-0.60	3.00
Exports of Goods and Services	105.32	225.51	254.30	259.85	266.36	277.12	284.44	299.63
Imports of Goods and Services	77.60	148.64	213.47	229.13	249.95	286.33	276.82	290.84
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	2.4	2.4	2.3	2.3	1.8	1.9	2.2	2.2
Industry	31.1	28.4	27.3	27.1	27.5	27.5	27.0	27.1
Services, etc.	59.6	61.9	63.4	63.6	63.7	63.8	64.1	64.1
Industrial Production Index (2005=100) *2	76.5	95.6	100.0	99.6	101.0	103.1	101.3	104.3
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	39.752	63.870	106.097	123.437	141.358	187.257	154.331	212.634
Imports, c.i.f.	41.985	71.529	125.281	139.253	165.336	200.273	165.471	201.639
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.358	-4.862	-13.372	-9.596	-17.784	-4.915	-4.215	18.180
Current Account	-15.948	-14.763	-41.032	-41.504	-58.032	-47.786	-43.891	-31.991
Overall Balance	1.740	-1.365	7.256	9.722	-35.148	3.692	8.550	0.434
Foreign Exchange Rate (AUD/USD) *1	1.2811	1.7248	1.3095	1.3280	1.1951	1.1922	1.2822	1.0902
PPP conversion factor, GDP (AUD/International Dollar) *1	1.3887	1.3116	1.3884	1.4096	1.4276	1.4791	1.4647	1.5304
Price Indices								
GDP Deflator (2009=100) *3	59.9	69.8	83.0	87.0	91.6	95.8	100.0	100.1
Manufacturing Output Price Index (2005=100) *2	76.6	87.5	100.0	107.9	110.5	119.6	113.1	115.3
Consumer Price Index (2005=100) *2	69.2	86.1	100.0	103.5	106.0	110.6	112.6	115.8
Growth Rate (%) *3								
Real GDP	3.57	3.95	2.96	3.08	3.56	3.83	1.45	2.26
Population	1.49	1.20	1.33	1.49	1.81	2.02	2.11	1.58
Price								
Manufacturing Output Price Index	6.0	7.1	6.0	7.9	2.3	8.3	-5.4	1.9
Consumer Price Index	7.3	4.5	2.7	3.5	2.3	4.4	1.8	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"

: AUD means Australian Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.2 Brunei Darussalam

## Energy Balance Table of Brunei Darussalam

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products				
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene
<b>2010</b>								
Indigenous Production	-	-	9,219	-	-	-	-	-
Import	-	-	14	142	38	-	3	86
Export	-	-	-8,718	-	-	-	-	-
International Marine Bunkers	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-111	-	-	-111	-
Stock Changes	-	-	183	3	-0	-	-1	3
<b>Total Primary Energy Supply</b>	-	-	<b>698</b>	<b>34</b>	<b>38</b>	-	<b>-109</b>	<b>89</b>
Transfers	-	-	-16	16	-	-	-	-
<b>Total Transformation Sector</b>	-	-	<b>-733</b>	<b>636</b>	<b>210</b>	-	<b>116</b>	<b>165</b>
Main Activity Producer	-	-	-	-10	-	-	-	-10
Autoproducers	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-733	645	210	-	116	175
Coal Transformation	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-17	-	-	-	-
Discrepancy	-	-	51	-4	3	-	-6	-5
<b>Total Final Energy Consumption</b>	-	-	-	<b>664</b>	<b>251</b>	-	-	<b>4</b>
<b>Industry Sector</b>	-	-	-	<b>150</b>	-	-	-	<b>105</b>
Iron and Steel	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	39	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-
Other Industries	-	-	-	111	-	-	-	4
<b>Transport Sector</b>	-	-	-	<b>395</b>	<b>251</b>	-	-	<b>144</b>
Domestic Air Transport	-	-	-	-	-	-	-	-
Road	-	-	-	395	251	-	-	144
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-
<b>Other Sector</b>	-	-	-	<b>104</b>	-	-	-	-
Residential	-	-	-	16	-	-	-	-
Commerce and Public Services	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	88	-	-	-	-
<b>Non-energy</b>	-	-	-	<b>15</b>	-	-	-	-
<b>2009</b>								
Indigenous Production	-	-	9,301	-	-	-	-	-
Import	-	-	17	93	22	-	-	61
Export	-	-	-8,369	-	-	-	-	-
International Marine Bunkers	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-86	-	-	-86	-
Stock Changes	-	-	-143	-2	-3	-	0	0
<b>Total Primary Energy Supply</b>	-	-	<b>806</b>	<b>5</b>	<b>19</b>	-	<b>-86</b>	<b>61</b>
Transfers	-	-	-18	18	-	-	-	-
<b>Total Transformation Sector</b>	-	-	<b>-769</b>	<b>628</b>	<b>197</b>	-	<b>95</b>	<b>160</b>
Main Activity Producer	-	-	-	-9	-	-	-	-9
Autoproducers	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-769	637	197	-	95	169
Coal Transformation	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-16	-	-	-	-
Discrepancy	-	-	-19	11	9	-	-9	-8
<b>Total Final Energy Consumption</b>	-	-	-	<b>646</b>	<b>225</b>	-	-	<b>3</b>
<b>Industry Sector</b>	-	-	-	<b>161</b>	-	-	-	<b>86</b>
Iron and Steel	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-
Other Industries	-	-	-	161	-	-	-	3
<b>Transport Sector</b>	-	-	-	<b>352</b>	<b>225</b>	-	-	<b>127</b>
Domestic Air Transport	-	-	-	-	-	-	-	-
Road	-	-	-	352	225	-	-	127
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-
<b>Other Sector</b>	-	-	-	<b>130</b>	-	-	-	<b>0</b>
Residential	-	-	-	18	-	-	-	0
Commerce and Public Services	-	-	-	-	-	-	-	-
Agriculture	-	-	-	0	-	-	-	0
Non-specified Others	-	-	-	112	-	-	-	-
<b>Non-energy</b>	-	-	-	<b>3</b>	-	-	-	-

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	11,410	-	-	-	-	-	-	20,630
-	-	-	-	15	-	-	-	-	-	-	-	155
-	-	-	-	-	-8,436	-	-	-	-	-	-	-17,154
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-111
-	-0	-	-	1	-	-	-	-	-	-	-	186
-	-0	-	-	16	2,975	-	-	-	-	-	-	3,706
-	16	-	-	-	-	-	-	-	-	-	-	0
88	-	56	-	-	-1,733	-	-	-	-	326	-	-1,504
-	-	-	-	-	-1,153	-	-	-	-	296	-	-867
-	-	-	-	-	-150	-	-	-	-	30	-	-120
-	-	-	-	-	-430	-	-	-	-	-	-	-430
88	-	56	-	-	-	-	-	-	-	-	-	-87
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-17	-	-	-446	-	-	-	-	-68	-	-531
-	0	-0	-	1	-765	-	-	-	-	28	-	-690
88	16	39	-	17	31	-	-	-	-	286	-	981
-	-	39	-	2	4	-	-	-	-	51	-	205
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	39	-	-	4	-	-	-	-	-	-	43
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	2	-	-	-	-	-	51	-	162
-	-	-	-	-	-	-	-	-	-	-	-	395
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	395
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
88	16	-	-	-	27	-	-	-	-	235	-	366
-	16	-	-	-	27	-	-	-	-	102	-	144
-	-	-	-	-	-	-	-	-	-	134	-	134
-	-	-	-	-	-	-	-	-	-	-	-	-
88	-	-	-	-	-	-	-	-	-	-	-	88
-	-	-	-	15	-	-	-	-	-	-	-	15
-	-	-	-	-	10,604	-	-	-	-	-	-	19,905
-	-	-	-	10	-	-	-	-	-	-	-	109
-	-	-	-	-	-8,735	-	-	-	-	-	-	-17,104
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-86
-	0	-	-	0	-	-	-	-	-	-	-	-145
-	0	-	-	10	1,868	-	-	-	-	-	-	2,679
-	18	-	-	-	-	-	-	-	-	-	-	-
79	-	65	-	32	-1,464	-	-	-	-	311	-	-1,294
-	-	-	-	-	-1,099	-	-	-	-	281	-	-826
-	-	-	-	-	-886	-	-	-	-	29	-	-856
-	-	-	-	-	521	-	-	-	-	-	-	521
79	-	65	-	32	-	-	-	-	-	-	-	-132
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-16	-	-	-435	-	-	-	-	-32	-	-483
-	0	16	-	1	60	-	-	-	-	-0	-	52
79	18	65	-	43	30	-	-	-	-	279	-	955
-	-	65	-	7	-	-	-	-	-	48	-	209
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	65	-	7	-	-	-	-	-	48	-	209
-	-	-	-	-	-	-	-	-	-	-	-	352
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	352
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
79	18	-	-	33	26	-	-	-	-	231	-	387
-	18	-	-	-	26	-	-	-	-	105	-	150
-	-	-	-	-	-	-	-	-	-	62	-	62
-	-	-	-	-	-	-	-	-	-	-	-	0
79	-	-	-	33	-	-	-	-	-	63	-	175
-	-	-	-	3	3	-	-	-	-	-	-	7

## Major Energy Indicators of Brunei Darussalam

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	2,071	2,701	2,123	3,927	3,872	2,722	2,679	3,706
Indigenous Production	15,259	17,411	21,630	22,478	20,834	20,999	19,905	20,630
Import	80	22	43	13	8	65	109	155
Export	-12,977	-14,845	-19,362	-18,546	-16,944	-18,160	-17,104	-17,154
Final Energy Consumption	417	636	577	683	733	940	955	981
Industry	53	91	96	102	102	188	209	205
Transport	255	324	219	330	357	362	352	395
Residential	-	-	127	29	74	214	150	144
Commerce & Public Services	-	-	119	-	191	57	62	134
Others	108	220	17	223	8	120	181	104
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	-	-	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	38	566	697	727	776	842	806	698
Indigenous Production	7,677	9,006	10,487	10,663	9,440	9,707	9,301	9,219
Import	76	-	-	-	-	17	17	14
Export	-7,424	-8,541	-9,806	-10,009	-8,704	-8,770	-8,369	-8,718
Transformation Sector	-	-	-706	-699	-696	-806	-769	-733
Petroleum Refineries	-321	-573	-706	-699	-696	-806	-769	-733
<b>Petroleum Products</b>								
Primary Energy Supply	0	22	-161	-68	-70	-38	5	34
Import	4	22	43	13	8	48	93	142
Export	-3	-1	-	-	-	-	-	-
Transformation Sector	-	-	632	629	644	661	628	636
Power Generation	-3	-5	-8	-8	-8	-8	-9	-10
Petroleum Refineries	290	566	639	636	652	669	637	645
Final Energy Consumption	309	401	300	412	436	642	646	664
Industry	17	40	47	53	54	141	161	150
Transport	255	324	219	330	357	362	352	395
Residential	-	-	17	16	17	19	18	16
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	37	37	17	13	8	120	115	104
<b>Natural Gas</b>								
Primary Energy Supply	2,033	2,113	1,587	3,269	3,166	1,918	1,868	2,975
Indigenous Production	7,583	8,405	11,143	11,816	11,394	11,291	10,604	11,410
Import	-	-	-	-	-	-	-	-
Export	-5,549	-6,302	-9,556	-8,537	-8,240	-9,390	-8,735	-8,436
Transformation Sector	-	-	-1,078	-2,002	-1,984	-1,443	-1,464	-1,733
Power Generation	-517	-1,378	-1,078	-1,923	-1,893	-1,966	-1,985	-1,303
Final Energy Consumption	25	22	13	13	29	28	30	31
Industry	-	-	-	-	-	-	-	4
Transport	-	-	-	-	-	-	-	-
Residential	-	-	13	13	29	28	26	27
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	25	22	-	-	-	-	3	-
<b>Electricity</b>								
Power Generation	101	244	281	284	292	294	311	326
Thermal	101	244	281	284	292	294	311	326
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Final Energy Consumption	82	213	264	258	268	270	279	286
Industry	36	51	49	48	48	47	48	51
Transport	-	-	-	-	-	-	-	-
Residential	-	-	96	-	29	166	105	102
Commerce & Public Services	-	-	119	-	191	57	62	134
Others	46	161	-	210	-	-	63	-

## Major Economic Indicators of Brunei Darussalam

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	0.25	0.33	0.36	0.37	0.38	0.38	0.39	0.40
Gross Domestic Product *4								
Real Term (Billions of 2000 Price and 2000 USD)	4.81	6.00	6.65	6.94	6.95	6.82	6.70	6.87
Real Term (Billions of 2000 Price and 2000 PPP)	11.27	14.06	15.58	16.27	16.29	15.98	15.70	16.10
Nominal (Billions of Current USD)	3.52	6.00	9.53	11.47	12.25	14.39	10.73	12.37
GDP per Capita *4								
Real Term (2000 Price and 2000 USD)	19,075	18,351	18,312	18,746	18,417	17,723	17,093	17,222
Real Term (2000 Price and 2000 PPP)	44,706	43,007	42,917	43,934	43,163	41,536	40,059	40,363
Nominal (Current USD)	13,963	18,351	26,248	30,975	32,443	37,415	27,391	31,004
Nominal GDP & its Components (Billions of Current BND) *1								
Gross Domestic Product	6.38	10.35	15.86	18.23	18.46	20.40	15.61	16.87
Household Final Consumption Expenditure, etc.	1.69	2.57	3.56	3.61	3.72	3.61	3.80	3.91
General Government Final Consumption Expenditure	1.41	2.67	2.92	3.29	4.18	3.50	3.64	3.78
Gross Fixed Capital Formation	1.19	1.34	1.80	1.91	2.40	2.79	2.74	2.68
Stock Change	0.00	0.01	0.00	-0.01	0.00	0.00	0.00	0.00
Exports of Goods and Services	3.94	6.97	11.13	13.07	12.52	15.97	11.36	13.74
Imports of Goods and Services	2.38	3.71	4.33	4.60	5.15	5.63	5.59	5.54
Real GDP & its Components (Billions of 2000 BND) *1								
Gross Domestic Product	8.29	10.35	11.46	11.97	11.99	11.75	11.55	11.85
Household Final Consumption Expenditure, etc.	2.02	2.57	3.49	3.62	3.69	3.75	3.94	4.01
General Government Final Consumption Expenditure	2.11	2.67	2.87	3.24	3.75	3.72	3.91	4.06
Gross Fixed Capital Formation	1.55	1.34	1.72	1.74	2.20	2.50	2.49	2.40
Stock Change	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Exports of Goods and Services	4.92	6.97	7.49	7.76	7.01	6.58	6.23	5.74
Imports of Goods and Services	2.98	3.71	4.25	4.43	5.01	5.56	5.52	5.50
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	0.8	1.0	1.3	1.1	1.1	1.1	1.2	1.1
Industry	63.3	63.7	61.2	60.3	56.8	54.8	53.0	52.5
Services, etc.	35.9	35.3	37.5	38.6	42.1	44.1	45.8	46.3
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.	2.213	3.903	6.249	7.636	7.668	10.319	7.200	8.907
Imports, c.i.f.	1.001	1.107	1.491	1.676	2.101	2.572	2.449	2.459
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	N.A.	4.829	6.039	5.700	7.840	4.889	N.A.
Current Account	N.A.	N.A.	4.033	5.229	4.828	6.939	3.977	N.A.
Overall Balance	N.A.	N.A.	-0.063	0.029	0.142	0.045	0.154	N.A.
Foreign Exchange Rate (BND/USD) *1	1.8125	1.7240	1.6644	1.5889	1.5071	1.4172	1.4546	1.3635
Purchasing Power Parity (BND/International Dollar) *1	0.6954	0.7356	0.9031	0.9627	0.9461	1.0431	0.8041	0.8372
Price Indices								
GDP Deflator (2000=100) *4	77.0	100.0	138.4	152.3	154.0	173.5	135.2	142.4
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	81.7	99.4	100.0	100.2	101.1	103.2	104.3	104.7
Growth Rate (%) *4								
Real GDP	1.09	2.85	0.39	4.40	0.15	-1.94	-1.77	2.60
Population	2.86	2.31	2.02	1.98	1.94	1.90	1.86	1.83
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index	2.1	1.6	1.2	0.2	1.0	2.1	1.0	0.4

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

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	33,800	-	165,816	-	-	-	-	-	-
Import	7,078	492	39,320	10,940	3,692	103	1,548	48	633
Export	-19,664	-54	-104,795	-20,463	-6,834	-734	-412	-17	-7,089
International Marine Bunkers	-	-	-	-681	-	-	-	-	-36
International Aviation Bunkers	-	-	-	-1,070	-	-	-1,070	-	-
Stock Changes	622	-	-1,530	-307	-459	-15	142	16	-123
<b>Total Primary Energy Supply</b>	<b>21,836</b>	<b>438</b>	<b>98,812</b>	<b>-11,582</b>	<b>-3,602</b>	<b>-646</b>	<b>208</b>	<b>47</b>	<b>-6,615</b>
Transfers	-	-	-3,229	7,300	1,473	127	-379	-371	523
<b>Total Transformation Sector</b>	<b>-21,576</b>	<b>1,079</b>	<b>-96,829</b>	<b>101,952</b>	<b>34,386</b>	<b>4,315</b>	<b>4,126</b>	<b>635</b>	<b>31,390</b>
Main Activity Producer	-18,948	-	-	-1,268	-	-	-	-	-153
Autoproducers	-2	-	-	-561	-	-	-	-	-80
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-97,939	103,781	34,386	4,315	4,126	635	31,623
Coal Transformation	-2,626	1,079	-	-	-	-	-	-	-
Other Transformation	-	-	1,109	-	-	-	-	-	-
Loss & Own Use	-27	-	-	-9,545	-3	-46	-5	-	-17
Discrepancy	1,178	-357	1,247	3,758	2,229	-0	183	9	2,299
<b>Total Final Energy Consumption</b>	<b>1,411</b>	<b>1,161</b>	<b>-</b>	<b>91,884</b>	<b>34,483</b>	<b>3,750</b>	<b>4,132</b>	<b>320</b>	<b>27,579</b>
<b>Industry Sector</b>	<b>1,408</b>	<b>1,161</b>	<b>-</b>	<b>7,216</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>59</b>	<b>4,243</b>
Iron and Steel	-	1,016	-	2	-	-	-	-	2
Chemical & Petrochemical	-	-	-	3	-	-	-	-	3
Non-metallic Minerals	-	-	-	10	-	-	-	-	1
Other Industries	1,408	144	-	7,201	-	-	-	59	4,237
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57,333</b>	<b>34,483</b>	<b>-</b>	<b>4,132</b>	<b>-</b>	<b>17,273</b>
Domestic Air Transport	-	-	-	4,191	59	-	4,132	-	-
Road	-	-	-	49,315	34,424	-	-	-	14,643
Rail	-	-	-	1,893	-	-	-	-	1,893
Inland Waterways	-	-	-	1,926	-	-	-	-	730
Pipeline Transport	-	-	-	8	-	-	-	-	8
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>8,023</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>262</b>	<b>6,063</b>
Residential	3	-	-	2,640	-	-	-	72	2,200
Commerce and Public Services	-	-	-	2,548	-	-	-	188	1,412
Agriculture	-	-	-	2,835	-	-	-	1	2,451
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>19,311</b>	<b>-</b>	<b>3,750</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	30,724	-	156,886	-	-	-	-	-	-
Import	7,058	227	40,797	12,024	4,194	86	1,440	75	1,615
Export	-16,799	-150	-102,296	-20,796	-6,226	-192	-339	-80	-7,791
International Marine Bunkers	-	-	-	-665	-	-	-	-	-36
International Aviation Bunkers	-	-	-	-787	-	-	-787	-	-
Stock Changes	1,158	-	193	626	-156	30	-23	24	172
<b>Total Primary Energy Supply</b>	<b>22,140</b>	<b>77</b>	<b>95,579</b>	<b>-9,598</b>	<b>-2,188</b>	<b>-76</b>	<b>291</b>	<b>20</b>	<b>-6,040</b>
Transfers	-	-	-2,325	5,834	1,234	61	-165	-1,138	250
<b>Total Transformation Sector</b>	<b>-20,764</b>	<b>797</b>	<b>-95,241</b>	<b>99,292</b>	<b>34,105</b>	<b>2,480</b>	<b>4,138</b>	<b>1,345</b>	<b>30,747</b>
Main Activity Producer	-18,697	-	-	-1,888	-	-	-	-	-160
Autoproducers	-2	-	-	-508	-	-	-	-	-71
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-96,031	101,688	34,105	2,480	4,138	1,345	30,978
Coal Transformation	-2,065	797	-	-	-	-	-	-	-
Other Transformation	-	-	790	-	-	-	-	-	-
Loss & Own Use	-53	-	-	-9,868	-1	-9	-	-	-16
Discrepancy	504	210	1,986	365	198	-72	7	68	586
<b>Total Final Energy Consumption</b>	<b>1,828</b>	<b>1,083</b>	<b>-</b>	<b>86,025</b>	<b>33,348</b>	<b>2,384</b>	<b>4,271</b>	<b>295</b>	<b>25,527</b>
<b>Industry Sector</b>	<b>1,825</b>	<b>1,083</b>	<b>-</b>	<b>6,211</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>3,858</b>
Iron and Steel	-	925	-	3	-	-	-	-	3
Chemical & Petrochemical	-	-	-	2	-	-	-	-	2
Non-metallic Minerals	-	-	-	13	-	-	-	-	1
Other Industries	1,825	158	-	6,194	-	-	-	28	3,852
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>54,955</b>	<b>33,348</b>	<b>-</b>	<b>4,271</b>	<b>-</b>	<b>15,821</b>
Domestic Air Transport	-	-	-	4,336	65	-	4,271	-	-
Road	-	-	-	47,206	33,282	-	-	-	13,673
Rail	-	-	-	1,466	-	-	-	-	1,466
Inland Waterways	-	-	-	1,930	-	-	-	-	665
Pipeline Transport	-	-	-	16	-	-	-	-	16
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>7,788</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>267</b>	<b>5,848</b>
Residential	3	-	-	2,869	-	-	-	50	2,410
Commerce and Public Services	-	-	-	2,533	-	-	-	215	1,384
Agriculture	-	-	-	2,385	-	-	-	1	2,053
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17,070</b>	<b>-</b>	<b>2,384</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	132,343	30,237	23,626	835	12,059	-	-	398,716
873	216	-	-	3,827	18,730	-	-	-	487	1,607	-	78,654
-2,716	-434	-	-	-2,227	-79,151	-	-	-	-551	-3,817	-	-228,495
-645	-	-	-	-	-	-	-	-	-	-	-	-681
-	-	-	-	-	-	-	-	-	-	-	-	-1,070
-99	-27	-	-	258	6,692	-	-	-	-	-	-	5,477
-2,588	-245	-	-	1,859	78,615	30,237	23,626	835	11,994	-2,210	-	252,601
310	2,435	-	5,221	-2,039	-	-	-	-	-	-	-	4,071
5,743	2,084	5,719	-	13,555	-14,248	-30,237	-23,626	-835	-3,088	52,284	453	-34,671
-604	-	-	-	-511	-8,269	-27,897	-23,626	-835	-11	48,033	402	-32,419
-105	-	-312	-	-63	-3,246	-2,340	-	-0	-2,048	4,251	50	-3,895
-	-	-	-	-	-1,933	-	-	-	-	-	-	-1,933
6,452	2,084	6,031	-	14,129	-	-	-	-	-	-	-	5,843
-	-	-	-	-	-	-	-	-	-	-	-	-1,547
-	-	-	-	-	-800	-	-	-	-1,029	-	-	-719
-372	-104	-5,761	-	-3,236	-13,954	-	-	-	-1	-9,658	-	-33,184
502	395	43	-	-1,902	1,518	-	-	-	0	-	-51	7,292
3,596	4,565	-	5,221	8,237	51,931	-	-	-	8,906	40,416	401	196,109
1,935	955	-	-	25	22,401	-	-	-	6,426	14,286	401	53,298
-	-	-	-	-	1,357	-	-	-	3	708	-	3,086
-	-	-	-	-	3,721	-	-	-	-	1,595	238	5,557
9	-	-	-	-	43	-	-	-	127	153	-	333
1,926	955	-	-	25	17,279	-	-	-	6,296	11,831	163	44,322
1,196	249	-	-	-	2,464	-	-	-	-	324	-	60,122
-	-	-	-	-	-	-	-	-	-	-	-	4,191
-	249	-	-	-	41	-	-	-	-	-	-	49,356
-	-	-	-	-	-	-	-	-	-	-	-	1,893
1,196	-	-	-	-	-	-	-	-	-	-	-	1,926
-	-	-	-	-	2,424	-	-	-	-	264	-	2,696
-	-	-	-	-	-	-	-	-	-	60	-	60
465	1,234	-	-	-	24,082	-	-	-	2,480	25,805	0	60,394
39	329	-	-	-	13,220	-	-	-	2,464	12,652	-	30,979
211	737	-	-	-	10,270	-	-	-	16	12,346	0	25,180
214	168	-	-	-	593	-	-	-	0	807	-	4,235
-	-	-	-	-	-	-	-	-	-	-	-	-
-	2,128	-	5,221	8,212	2,983	-	-	-	-	-	-	22,295
-	-	-	-	-	135,378	31,713	23,478	580	12,059	-	-	390,818
700	206	-	-	3,707	17,066	-	-	-	264	1,562	-	78,998
-2,787	-293	-	-	-3,088	-78,678	-	-	-	-434	-4,453	-	-223,607
-629	-	-	-	-	-	-	-	-	-	-	-	-665
-	-	-	-	-	-	-	-	-	-	-	-	-787
70	45	-	-	464	4,625	-	-	-	-	-	-	6,602
-2,646	-42	-	-	1,084	78,392	31,713	23,478	580	11,889	-2,891	-	251,359
712	2,352	-	5,479	-2,952	-	-	-	-	-	-	-	3,509
4,893	1,965	5,943	-	13,677	-12,158	-31,713	-23,478	-580	-2,621	52,808	934	-32,724
-1,153	-	-	-	-576	-6,641	-28,983	-23,478	-580	-11	48,291	884	-31,105
-66	-	-307	-	-63	-2,970	-2,730	-	-0	-1,828	4,517	50	-3,470
-	-	-	-	-	-1,962	-	-	-	-	-	-	-1,962
6,113	1,965	6,249	-	14,316	-	-	-	-	-	-	-	5,657
-	-	-	-	-	-	-	-	-	-	-	-	-1,268
-	-	-	-	-	-586	-	-	-	-781	-	-	-577
-412	-29	-5,984	-	-3,417	-14,610	-	-	-	-1	-9,909	-0	-34,441
713	321	41	-	-1,498	297	-	-	-	-0	-0	-52	3,311
3,261	4,566	-	5,479	6,893	51,921	-	-	-	9,267	40,008	882	191,015
1,460	840	-	-	24	20,573	-	-	-	6,940	13,934	882	51,448
-	-	-	-	-	1,289	-	-	-	4	654	-	2,875
-	-	-	-	-	3,287	-	-	-	-	1,561	304	5,154
12	-	-	-	-	43	-	-	-	110	156	-	322
1,449	840	-	-	24	15,954	-	-	-	6,826	11,562	578	43,097
1,265	251	-	-	-	2,722	-	-	-	-	332	-	58,009
-	-	-	-	-	-	-	-	-	-	-	-	4,336
-	251	-	-	-	40	-	-	-	-	-	-	47,247
-	-	-	-	-	-	-	-	-	-	-	-	1,466
1,265	-	-	-	-	-	-	-	-	-	-	-	1,930
-	-	-	-	-	2,682	-	-	-	-	275	-	2,973
-	-	-	-	-	-	-	-	-	-	57	-	57
536	1,138	-	-	-	25,645	-	-	-	2,327	25,743	1	61,507
98	311	-	-	-	14,196	-	-	-	2,323	12,754	0	32,144
265	669	-	-	-	10,936	-	-	-	5	12,171	0	25,645
173	158	-	-	-	514	-	-	-	0	818	0	3,717
-	-	-	-	-	-	-	-	-	-	-	-	-
-	2,337	-	5,479	6,870	2,981	-	-	-	-	-	-	20,051

## Major Energy Indicators of Canada

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	208,572	252,649	272,802	268,965	272,325	266,836	251,359	252,601
Indigenous Production	273,734	373,927	401,686	411,225	416,703	406,690	390,818	398,716
Import	46,404	72,056	82,020	79,930	79,804	85,682	78,998	78,654
Export	-105,728	-199,765	-215,945	-220,777	-230,929	-230,227	-223,607	-228,495
Final Energy Consumption	158,800	189,160	202,712	196,280	204,672	200,186	191,015	196,109
Industry	47,276	54,686	57,507	54,343	57,098	53,026	51,448	53,298
Transport	43,122	52,231	55,774	55,466	58,119	56,896	58,009	60,122
Residential	28,722	30,875	31,182	29,857	32,126	32,634	32,144	30,979
Commerce & Public Services	21,727	27,425	31,111	29,588	30,960	31,941	25,645	25,180
Others	17,953	23,942	27,139	27,027	26,368	25,689	23,768	26,530
<b>Coal, Coal Products</b>								
Primary Energy Supply	24,276	31,661	28,829	28,600	26,436	27,803	22,217	22,274
Indigenous Production	37,927	34,407	31,865	32,350	34,276	34,373	30,724	33,800
Import	9,547	15,048	11,778	12,691	10,496	12,335	7,285	7,570
Export	-21,442	-19,269	-16,854	-16,846	-18,404	-19,333	-16,950	-19,718
Transformation Sector	-21,399	-28,643	-25,619	-25,071	-25,336	-25,157	-19,967	-20,497
Power Generation	-19,972	-26,964	-24,005	-23,337	-23,557	-23,564	-18,699	-18,950
Final Energy Consumption	2,924	2,939	3,066	3,101	3,188	2,792	2,911	2,572
Industry	2,872	2,902	3,031	3,062	3,158	2,759	2,908	2,568
Transport	-	-	-	-	-	-	-	-
Residential	47	36	35	39	30	33	3	3
Commerce & Public Services	5	1	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	83,138	97,125	107,073	103,093	109,647	102,037	95,579	98,812
Indigenous Production	94,488	128,871	148,012	155,932	162,519	158,307	156,886	165,816
Import	27,134	46,942	46,637	42,841	43,239	42,564	40,797	39,320
Export	-37,811	-78,446	-85,864	-95,276	-97,872	-99,188	-102,296	-104,795
Transformation Sector	-85,889	-95,287	-101,590	-100,319	-102,409	-98,169	-95,241	-96,829
Petroleum Refineries	-85,889	-95,420	-101,760	-100,457	-103,071	-98,871	-96,031	-97,939
<b>Petroleum Products</b>								
Primary Energy Supply	-6,283	-8,855	-9,202	-8,462	-10,155	-7,582	-9,598	-11,582
Import	7,673	7,362	14,019	14,398	13,306	15,519	12,024	10,940
Export	-11,857	-14,895	-21,818	-20,829	-21,687	-21,862	-20,796	-20,463
Transformation Sector	82,854	93,386	101,859	100,914	104,228	100,433	99,292	101,952
Power Generation	-3,796	-3,148	-3,261	-2,733	-2,792	-2,590	-2,396	-1,829
Petroleum Refineries	86,651	96,534	105,120	103,648	107,020	103,023	101,688	103,781
Final Energy Consumption	68,787	81,000	93,288	89,668	92,244	90,809	86,025	91,884
Industry	6,787	6,457	8,792	6,019	6,363	5,831	6,211	7,216
Transport	39,944	47,084	51,109	50,986	53,628	53,362	54,955	57,333
Residential	4,659	3,249	2,373	2,154	2,313	2,067	2,869	2,640
Commerce & Public Services	4,077	5,778	8,586	8,154	8,203	8,282	2,533	2,548
Others	13,321	18,431	22,428	22,354	21,737	21,267	19,456	22,146
<b>Natural Gas</b>								
Primary Energy Supply	54,743	74,259	80,624	79,651	80,619	78,283	78,392	78,615
Indigenous Production	88,579	148,361	154,077	154,909	151,404	145,018	135,378	132,343
Import	521	1,329	7,833	7,923	10,798	12,831	17,066	18,730
Export	-33,045	-82,681	-87,402	-83,797	-88,274	-84,712	-78,678	-79,151
Transformation Sector	-2,447	-8,812	-9,249	-8,824	-10,952	-11,665	-12,158	-14,248
Power Generation	-1,868	-7,356	-7,512	-7,203	-8,662	-9,380	-9,611	-11,515
Final Energy Consumption	43,314	53,426	51,626	50,558	55,642	53,233	51,921	51,931
Industry	16,856	19,318	18,756	19,328	22,700	21,015	20,573	22,401
Transport	2,897	4,758	4,299	4,091	4,143	3,199	2,722	2,464
Residential	11,359	13,861	13,899	13,273	14,667	14,812	14,196	13,220
Commerce & Public Services	8,322	10,816	10,853	10,051	10,311	10,604	10,936	10,270
Others	3,880	4,673	3,819	3,816	3,820	3,602	3,494	3,576
<b>Electricity</b>								
Power Generation	41,465	52,091	53,848	52,759	54,953	55,130	52,808	52,284
Thermal	8,612	12,909	12,231	11,578	12,954	12,755	10,849	11,277
Hydro	25,529	30,841	31,281	30,355	31,622	32,199	31,713	30,237
Nuclear	6,347	6,324	7,995	8,510	8,121	8,161	7,826	7,875
Others	977	2,017	2,341	2,317	2,256	2,016	2,419	2,894
Final Energy Consumption	35,960	41,421	44,046	42,702	43,258	42,984	40,008	40,416
Industry	14,443	17,485	18,197	17,494	16,605	15,155	13,934	14,286
Transport	281	389	366	390	348	335	332	324
Residential	11,165	11,888	12,985	12,641	13,146	13,715	12,754	12,652
Commerce & Public Services	9,319	10,821	11,608	11,323	12,351	12,961	12,171	12,346
Others	751	837	890	855	809	818	818	807

## Major Economic Indicators of Canada

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	27.79	30.77	32.31	32.58	32.93	33.32	33.73	34.13
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	543.64	724.91	821.94	845.14	863.73	869.68	845.59	872.78
Real Term (Billions of 2000 Price and 2000 PPP)	655.51	874.09	991.07	1,019.05	1,041.47	1,048.64	1,019.60	1,052.38
Nominal (Billions of Current USD)	582.74	724.91	1,133.76	1,278.61	1,424.07	1,502.68	1,337.58	1,577.04
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	19,562	23,559	25,437	25,944	26,230	26,102	25,070	25,575
Real Term (2000 Price and 2000 PPP)	23,587	28,407	30,672	31,282	31,627	31,473	30,229	30,838
Nominal (Current USD)	20,968	23,559	35,088	39,250	43,246	45,100	39,656	46,212
Nominal GDP & its Components (Billions of Current CAD) *1								
Gross Domestic Product	679.92	1,076.58	1,373.85	1,450.41	1,529.59	1,603.42	1,528.99	1,624.61
Household Final Consumption Expenditure, etc.	385.41	596.01	758.97	801.74	851.60	890.60	898.22	940.62
General Government Final Consumption Expenditure	151.42	200.08	259.86	277.61	293.61	315.98	337.74	353.57
Gross Fixed Capital Formation	144.86	206.27	292.66	324.53	347.21	366.70	326.00	358.48
Stock Change	-2.68	11.53	10.61	9.36	8.27	5.90	-6.95	2.26
Exports of Goods and Services	175.51	490.69	519.44	524.08	534.72	563.08	439.53	478.13
Imports of Goods and Services	174.62	428.75	468.27	487.67	505.06	538.65	465.33	508.65
Real GDP & its Components (Billions of 2000 CAD) *1								
Gross Domestic Product	908.68	1,211.68	1,373.85	1,412.63	1,443.71	1,453.65	1,413.39	1,458.83
Household Final Consumption Expenditure, etc.	508.47	649.42	758.97	790.54	826.65	851.36	855.00	883.45
General Government Final Consumption Expenditure	210.82	228.74	259.86	267.75	275.04	287.13	297.47	304.75
Gross Fixed Capital Formation	168.87	221.52	292.66	313.31	324.41	331.04	288.08	317.01
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	227.39	505.90	519.44	522.49	528.89	504.05	434.56	462.39
Imports of Goods and Services	208.09	402.66	468.27	491.35	520.39	528.05	457.27	517.35
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	2.3	1.8	1.7	1.7	1.6	1.7	1.7	1.6
Industry	32.3	32.4	30.2	29.4	28.9	27.9	25.6	26.4
Services, etc.	65.5	65.8	68.1	68.9	69.5	70.4	72.7	72.0
Industrial Production Index (2005=100) *2	64.0	88.3	100.0	102.7	105.1	105.6	102.8	106.3
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	127.629	276.635	360.475	388.178	420.693	456.471	316.567	387.912
Imports, c.i.f.	123.244	244.786	322.411	359.000	390.188	419.011	329.907	402.500
Balance of Payments (Billions of Current USD) *2								
Trade Balance	9.513	45.047	51.736	43.655	43.770	43.803	-4.394	-8.682
Current Account	-19.764	19.622	21.714	18.084	12.003	6.376	-40.024	-49.307
Overall Balance	1.139	3.720	1.335	0.826	3.906	1.769	10.470	3.815
Foreign Exchange Rate (CAD/USD) *1	1.1668	1.4851	1.2118	1.1344	1.0741	1.0670	1.1431	1.0302
Purchasing Power Parity (CAD/International Dollar) *1	1.2547	1.2317	1.2136	1.2078	1.2112	1.2344	1.1979	1.2191
Price Indices								
GDP Deflator (2005=100) *3	74.8	88.9	100.0	102.7	105.9	110.3	108.2	111.4
Industry Selling Price Index (2005=100) *2	75.5	95.5	100.0	102.3	103.8	108.4	104.6	105.6
Consumer Price Index (2005=100) *2	73.2	89.2	100.0	102.0	104.2	106.7	107.0	108.9
Growth Rate (%) *3								
Real GDP	0.19	5.23	3.02	2.82	2.20	0.69	-2.77	3.21
Population	1.50	0.89	0.99	0.82	1.09	1.18	1.23	1.17
Price								
Industry Selling Price Index	0.3	4.3	1.6	2.3	1.5	4.3	-3.5	1.0
Consumer Price Index	4.8	2.7	2.2	2.0	2.1	2.4	0.3	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"

: CAD means Canadian Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.4 Chile



## Energy Balance Table of Chile

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	254	-	611	-	-	-	-	-	-
Import	3,808	1	8,659	7,340	789	-	305	-	4,706
Export	-	-	-	-627	-234	-35	-	-	-342
International Marine Bunkers	-	-	-	-401	-	-	-	-	-20
International Aviation Bunkers	-	-	-	-513	-	-	-513	-	-
Stock Changes	529	-29	-3	-58	57	5	-9	13	-49
<b>Total Primary Energy Supply</b>	<b>4,591</b>	<b>-28</b>	<b>9,267</b>	<b>5,741</b>	<b>611</b>	<b>-30</b>	<b>-217</b>	<b>13</b>	<b>4,295</b>
Transfers	-	-	839	-801	-109	-37	-22	22	-62
<b>Total Transformation Sector</b>	<b>-4,204</b>	<b>207</b>	<b>-9,894</b>	<b>7,146</b>	<b>2,179</b>	<b>77</b>	<b>623</b>	<b>61</b>	<b>1,760</b>
Main Activity Producer	-3,856	-	-	-1,586	-	-	-	-	-1,228
Autoproducers	-	-	-	-138	-	-	-	-	-32
Gas Processing	-	-	-	-5	-	-	-	-	-
Petroleum Refineries	-	-	-9,894	8,874	2,179	77	623	61	3,020
Coal Transformation	-348	207	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-110	-	-385	-	-	-	-	-18
Discrepancy	-54	-12	-211	378	275	-11	-25	-3	-126
<b>Total Final Energy Consumption</b>	<b>332</b>	<b>57</b>	<b>-</b>	<b>12,079</b>	<b>2,955</b>	<b>-</b>	<b>359</b>	<b>92</b>	<b>5,849</b>
<b>Industry Sector</b>	<b>328</b>	<b>57</b>	<b>-</b>	<b>3,020</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>41</b>	<b>1,925</b>
Iron and Steel	-	44	-	10	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	52	-	-	190	-	-	-	-	11
Other Industries	275	14	-	2,820	-	-	-	41	1,913
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,089</b>	<b>2,953</b>	<b>-</b>	<b>359</b>	<b>-</b>	<b>3,486</b>
Domestic Air Transport	-	-	-	368	7	-	359	-	1
Road	-	-	-	6,258	2,946	-	-	-	3,305
Rail	-	-	-	44	-	-	-	-	44
Inland Waterways	-	-	-	419	-	-	-	-	135
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>1,671</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>439</b>
Residential	-	-	-	932	-	-	-	50	3
Commerce and Public Services	-	-	-	464	-	-	-	1	283
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	5	-	-	275	2	-	-	-	152
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>300</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	236	-	721	-	-	-	-	-	-
Import	3,335	-	10,221	6,944	592	3	151	-	4,368
Export	-	-	-	-1,122	-494	-24	-	-	-490
International Marine Bunkers	-	-	-	-817	-	-	-	-	-38
International Aviation Bunkers	-	-	-	-439	-	-	-439	-	-
Stock Changes	-49	-	-87	-55	-118	-12	17	-6	59
<b>Total Primary Energy Supply</b>	<b>3,522</b>	<b>-</b>	<b>10,855</b>	<b>4,511</b>	<b>-20</b>	<b>-32</b>	<b>-271</b>	<b>-6</b>	<b>3,899</b>
Transfers	-	-	897	-864	-142	-92	-6	6	-
<b>Total Transformation Sector</b>	<b>-3,725</b>	<b>198</b>	<b>-11,915</b>	<b>7,822</b>	<b>2,623</b>	<b>125</b>	<b>650</b>	<b>63</b>	<b>1,622</b>
Main Activity Producer	-3,320	-	-	-2,274	-	-	-	-	-1,868
Autoproducers	-	-	-	-168	-	-	-	-	-70
Gas Processing	-	-	-	-76	-	-	-	-	-
Petroleum Refineries	-	-	-11,915	10,346	2,623	125	650	63	3,560
Coal Transformation	-404	198	-	-6	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-5	-133	-	-827	-	-	-	-	-2
Discrepancy	341	11	162	1,011	213	-	-67	65	367
<b>Total Final Energy Consumption</b>	<b>134</b>	<b>76</b>	<b>-</b>	<b>11,653</b>	<b>2,673</b>	<b>-</b>	<b>306</b>	<b>128</b>	<b>5,886</b>
<b>Industry Sector</b>	<b>124</b>	<b>76</b>	<b>-</b>	<b>3,169</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>39</b>	<b>2,028</b>
Iron and Steel	-	61	-	13	-	-	-	-	1
Chemical & Petrochemical	-	-	-	9	-	-	-	-	-
Non-metallic Minerals	31	-	-	231	-	-	-	-	9
Other Industries	93	16	-	2,916	-	-	-	39	2,018
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,836</b>	<b>2,673</b>	<b>-</b>	<b>306</b>	<b>-</b>	<b>3,655</b>
Domestic Air Transport	-	-	-	312	5	-	306	-	1
Road	-	-	-	6,000	2,668	-	-	-	3,326
Rail	-	-	-	44	-	-	-	-	44
Inland Waterways	-	-	-	479	-	-	-	-	283
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>1,429</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>89</b>	<b>203</b>
Residential	-	-	-	957	-	-	-	80	6
Commerce and Public Services	3	-	-	326	-	-	-	9	134
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	7	-	-	146	-	-	-	-	62
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>219</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	1,554	1,868	-	29	4,904	-	-	9,218
410	906	-	-	225	3,007	-	-	-	-	82	-	22,897
-	-15	-	-	-	-	-	-	-	-	-	-	-627
-381	-	-	-	-	-	-	-	-	-	-	-	-401
-	-	-	-	-	-	-	-	-	-	-	-	-513
-9	-28	-	-	-38	-86	-	-	-	-	-	-	354
20	863	-	-	186	4,475	1,868	-	29	4,904	82	-	30,928
-132	-40	-	-	-421	-	-	-	-	-	-	-	38
1,148	441	256	-	601	-1,761	-1,868	-	-29	-677	5,197	-	-5,882
-91	-	-	-	-267	-1,718	-1,839	-	-29	-33	4,881	-	-4,179
-106	-	-	-	-	-34	-29	-	-	-334	316	-	-219
-	-5	-	-	-	-8	-	-	-	-	-	-	-13
1,345	445	256	-	868	-	-	-	-	-	-	-	-1,020
-	-	-	-	-	-	-	-	-	-	-	-	-141
-	-	-	-	-	-	-	-	-	-310	-	-	-310
-34	-78	-256	-	-	-362	-	-	-	-	-655	-	-1,512
68	156	-	-	44	18	-	-	-	15	83	-	216
1,072	1,342	-	-	410	2,370	-	-	-	4,242	4,707	-	23,788
625	250	-	-	180	1,100	-	-	-	1,091	3,083	-	8,679
10	-	-	-	-	4	-	-	-	-	40	-	97
-	-	-	-	-	118	-	-	-	-	40	-	158
-	-	-	-	179	3	-	-	-	2	47	-	295
615	250	-	-	1	975	-	-	-	1,089	2,956	-	8,129
283	7	-	-	-	18	-	-	-	-	37	-	7,143
-	-	-	-	-	-	-	-	-	-	-	-	368
-	7	-	-	-	18	-	-	-	-	-	-	6,275
-	-	-	-	-	-	-	-	-	-	37	-	82
283	-	-	-	-	-	-	-	-	-	-	-	419
-	-	-	-	-	-	-	-	-	-	-	-	-
163	1,016	-	-	-	528	-	-	-	3,151	1,587	-	6,942
-	879	-	-	-	398	-	-	-	3,151	805	-	5,286
47	132	-	-	-	128	-	-	-	-	775	-	1,367
-	-	-	-	-	-	-	-	-	-	-	-	-
116	5	-	-	-	3	-	-	-	-	7	-	289
-	70	-	-	230	724	-	-	-	-	-	-	1,024
-	-	-	-	-	1,551	2,175	-	7	5,512	-	-	10,202
461	1,047	-	-	321	1,228	-	-	-	-	116	-	21,844
-78	-36	-	-	-	-	-	-	-	-	-	-	-1,122
-779	-	-	-	-	-	-	-	-	-	-	-	-817
-	-	-	-	-	-	-	-	-	-	-	-	-439
14	14	-	-	-23	15	-	-	-	-	-	-	-175
-381	1,025	-	-	298	2,794	2,175	-	7	5,512	116	-	29,493
-185	-19	-	-	-424	-	-	-	-	-	-	-	34
1,502	216	656	-	367	-621	-2,175	-	-7	-1,037	5,222	-	-6,238
-126	-11	-	-	-269	-726	-2,133	-	-7	-39	4,746	-	-3,752
-97	-1	-	-	-	-31	-43	-	-	-694	476	-	-460
-	-76	-	-	-	135	-	-	-	-	-	-	60
1,730	304	656	-	636	-	-	-	-	-	-	-	-1,569
-6	-	-	-	-	-	-	-	-	-	-	-	-212
-	-	-	-	-	-	-	-	-	-305	-	-	-305
-45	-124	-656	-	-	-512	-	-	-	-	-765	-	-2,243
20	340	-	-	73	-193	0	-	-	12	74	-	1,418
910	1,437	-	-	314	1,468	-	-	-	4,486	4,647	-	22,464
591	302	-	-	209	153	-	-	-	1,498	3,147	-	8,166
12	-	-	-	-	5	-	-	-	-	44	-	122
-	9	-	-	-	16	-	-	-	-	41	-	66
12	1	-	-	209	1	-	-	-	2	44	-	308
568	291	-	-	-	131	-	-	-	1,496	3,018	-	7,670
196	7	-	-	-	20	-	-	-	-	36	-	6,893
-	-	-	-	-	-	-	-	-	-	-	-	312
-	7	-	-	-	20	-	-	-	-	-	-	6,020
-	-	-	-	-	-	-	-	-	-	36	-	81
196	-	-	-	-	-	-	-	-	-	-	-	479
-	-	-	-	-	-	-	-	-	-	-	-	-
123	1,014	-	-	-	527	-	-	-	2,988	1,464	-	6,418
-	871	-	-	-	379	-	-	-	2,988	765	-	5,090
44	138	-	-	-	143	-	-	-	-	684	-	1,156
-	-	-	-	-	-	-	-	-	-	-	-	-
79	6	-	-	-	5	-	-	-	-	14	-	173
-	114	-	-	105	768	-	-	-	-	-	-	987

## Major Energy Indicators of Chile

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	14,229	25,219	28,354	29,508	30,569	30,313	29,493	30,928
Indigenous Production	7,928	8,587	9,338	9,621	9,372	9,729	10,202	9,218
Import	7,237	18,633	22,229	23,520	25,086	23,343	21,844	22,897
Export	-211	-889	-1,748	-2,003	-1,245	-1,296	-1,122	-627
Final Energy Consumption	11,087	20,373	21,768	22,832	22,844	22,538	22,464	23,788
Industry	3,409	6,648	7,230	7,985	8,318	8,440	8,166	8,679
Transport	3,046	5,665	6,159	6,076	6,580	6,835	6,893	7,143
Residential	3,112	4,851	4,882	4,928	5,070	4,987	5,090	5,286
Commerce & Public Services	478	623	928	972	1,039	1,133	1,156	1,367
Others	1,043	2,587	2,568	2,871	1,837	1,144	1,160	1,313
<b>Coal, Coal Products</b>								
Primary Energy Supply	2,496	3,071	2,704	3,319	3,219	4,403	3,522	4,562
Indigenous Production	1,451	243	269	263	104	263	236	254
Import	1,132	2,943	2,442	3,007	3,916	4,160	3,335	3,809
Export	-	-27	-27	-6	-30	-9	-	-
Transformation Sector	-1,822	-2,336	-1,985	-2,606	-2,734	-3,538	-3,526	-3,997
Power Generation	-1,650	-2,081	-1,713	-2,363	-2,543	-3,307	-3,320	-3,856
Final Energy Consumption	579	595	531	697	417	463	210	389
Industry	522	583	515	679	407	448	200	385
Transport	-	-	-	-	-	-	-	-
Residential	15	-	1	-	-	-	-	-
Commerce & Public Services	3	3	3	4	4	4	3	-
Others	39	9	12	14	7	11	7	5
<b>Crude Oil</b>								
Primary Energy Supply	6,727	10,402	10,894	11,895	11,420	11,183	10,855	9,267
Indigenous Production	1,166	427	355	348	592	602	721	611
Import	5,561	9,975	10,539	11,450	11,127	10,396	10,221	8,659
Export	-	-	-	-	-	-	-	-
Transformation Sector	-6,279	-10,014	-11,241	-12,726	-11,998	-11,746	-11,915	-9,894
Petroleum Refineries	-6,279	-10,014	-11,241	-12,726	-11,998	-11,746	-11,915	-9,894
<b>Petroleum Products</b>								
Primary Energy Supply	-37	118	666	376	4,776	5,109	4,511	5,741
Import	544	1,941	3,788	4,042	7,564	8,032	6,944	7,340
Export	-211	-862	-1,721	-1,998	-1,215	-1,287	-1,122	-627
Transformation Sector	5,756	9,284	10,135	11,182	8,000	7,965	7,822	7,146
Power Generation	-476	-457	-941	-727	-3,107	-3,080	-2,442	-1,723
Petroleum Refineries	6,276	9,742	11,085	11,924	11,179	11,159	10,346	8,874
Final Energy Consumption	5,488	9,185	9,554	9,788	11,129	11,532	11,653	12,079
Industry	1,339	2,049	2,071	2,457	3,152	3,242	3,169	3,020
Transport	3,022	5,639	6,107	6,016	6,522	6,785	6,836	7,089
Residential	754	1,088	880	887	945	896	957	932
Commerce & Public Services	123	160	227	208	243	345	326	464
Others	250	250	269	219	267	265	366	575
<b>Natural Gas</b>								
Primary Energy Supply	1,142	5,207	6,797	6,263	3,832	2,111	2,794	4,475
Indigenous Production	1,411	1,598	1,605	1,551	1,494	1,456	1,551	1,554
Import	-	3,671	5,275	4,824	2,338	655	1,228	3,007
Export	-	-	-	-	-	-	-	-
Transformation Sector	1,421	-1,668	-2,674	-1,992	-116	308	-621	-1,761
Power Generation	-63	-1,653	-2,710	-2,028	-918	-470	-757	-1,753
Final Energy Consumption	951	3,331	3,530	3,791	2,325	1,421	1,468	2,370
Industry	3	672	777	659	227	63	153	1,100
Transport	6	8	31	32	23	13	20	18
Residential	172	266	357	360	401	366	379	398
Commerce & Public Services	28	71	89	118	133	127	143	128
Others	742	2,314	2,277	2,622	1,542	852	773	726
<b>Electricity</b>								
Power Generation	1,580	3,447	4,514	4,758	5,032	5,135	5,222	5,197
Thermal	719	1,524	1,694	1,773	2,549	2,536	2,307	2,934
Hydro	768	1,592	2,278	2,505	1,989	2,081	2,175	1,868
Nuclear	-	-	-	-	-	-	-	-
Others	93	331	543	479	494	518	739	396
Final Energy Consumption	1,332	3,161	4,155	4,369	4,561	4,602	4,647	4,707
Industry	873	2,209	2,801	2,950	3,080	3,140	3,147	3,083
Transport	18	19	22	28	35	37	36	37
Residential	372	532	712	735	766	752	765	805
Commerce & Public Services	60	388	609	641	659	657	684	775
Others	8	14	11	16	21	16	14	7

## Major Economic Indicators of Chile

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	13.19	15.42	16.30	16.47	16.63	16.80	16.96	17.11
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	40.45	75.20	91.27	96.47	101.45	104.79	103.70	110.02
Real Term (Billions of 2000 Price and 2000 PPP)	76.84	142.86	173.40	183.27	192.73	199.07	197.01	209.02
Nominal (Billions of Current USD)	31.56	75.20	123.06	154.67	173.08	179.63	172.59	216.31
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	3,067	4,877	5,599	5,858	6,099	6,239	6,116	6,429
Real Term (2000 Price and 2000 PPP)	5,827	9,265	10,637	11,128	11,587	11,853	11,619	12,213
Nominal (Current USD)	2,393	4,877	7,549	9,392	10,406	10,695	10,179	12,639
Nominal GDP & its Components (Billions of Current CLP) *1								
Gross Domestic Product	9,622.3	40,575.3	68,882.8	82,018.2	90,428.8	93,847.9	96,799.2	110,371.4
Household Final Consumption Expenditure, etc.	5,886.6	25,897.2	41,396.9	45,804.6	51,064.9	57,081.9	57,713.2	64,348.3
General Government Final Consumption Expenditure	961.7	5,053.9	7,283.0	8,161.9	9,327.6	10,553.3	12,219.9	13,241.1
Gross Fixed Capital Formation	2,278.7	8,410.7	14,794.3	15,636.6	17,937.1	23,178.5	21,026.6	23,687.6
Stock Change	144.4	457.4	1,429.6	1,678.8	1,257.6	1,183.5	-1,464.6	2,304.0
Exports of Goods and Services	3,270.2	12,820.2	26,728.5	34,803.5	39,632.2	38,953.2	35,849.0	42,009.1
Imports of Goods and Services	2,939.6	12,064.1	21,995.0	24,204.3	28,901.9	37,102.5	28,545.0	35,218.6
Real GDP & its Components (Billions of 1986 CLP) *1								
Gross Domestic Product	36,225.7	67,346.6	81,743.0	86,397.7	90,856.5	93,847.9	92,875.3	98,536.2
Household Final Consumption Expenditure, etc.	19,139.6	37,704.9	48,626.1	51,615.5	54,797.9	57,081.9	56,633.3	63,227.5
General Government Final Consumption Expenditure	5,286.4	7,548.0	9,214.0	9,803.7	10,504.0	10,553.3	11,522.5	11,967.2
Gross Fixed Capital Formation	5,382.8	11,254.3	17,170.3	17,573.1	19,545.8	23,178.5	20,375.3	23,279.2
Stock Change	223.2	824.9	433.3	1,317.6	977.1	1,183.5	-1,733.0	2,001.5
Exports of Goods and Services	10,057.8	24,375.8	33,417.6	35,119.9	37,777.2	38,953.2	37,180.9	37,691.4
Imports of Goods and Services	5,851.6	16,112.1	26,108.8	28,879.1	33,069.6	37,102.5	31,103.7	39,630.6
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	4.4	3.0	3.4	3.3	3.3	3.3	3.2	3.1
Industry	43.1	39.2	39.4	38.3	36.4	35.2	34.9	33.8
Services, etc.	50.5	52.1	49.7	50.7	52.1	53.0	53.9	54.9
Manufacturing Production Index (2005=100) *2	56.9	80.0	100.0	103.2	107.5	107.7	100.5	101.1
External Trade (Billions of Current USD) *1								
Exports, f.o.b	8.372	19.210	41.267	58.680	67.972	66.259	54.004	71.028
Imports, c.i.f.	7.742	18.507	32.735	38.406	47.164	62.024	42.571	58.956
Balance of Payments (Billions of Current USD) *2								
Trade Balance	1.284	2.119	10.775	22.780	23.941	8.529	14.117	15.855
Current Account	-0.485	-0.898	1.449	7.154	7.458	-3.307	2.570	3.802
Overall Balance	2.323	0.317	1.711	1.998	-3.214	6.461	1.648	3.023
Foreign Exchange Rate (CLP/USD) *1	304.9033	539.5875	559.7675	530.2750	522.4642	522.4610	560.8599	510.2492
Purchasing Power Parity (CLP/International Dollar) *1	161.4435	284.0265	333.6900	363.4168	372.4341	365.2429	376.1496	399.6447
Price Indices								
GDP Deflator (2008=100) *3	26.6	60.2	84.3	94.9	99.5	100.0	104.2	112.0
Industry Selling Price Index (2005=100) *2	34.2	75.4	100.0	107.0	114.1	133.1	133.5	130.8
Consumer Price Index (2005=100) *2	35.8	88.0	100.0	103.4	108.0	117.4	119.1	N.A.
Growth Rate (%) *3								
Real GDP	3.70	4.49	4.27	5.69	5.16	3.29	-1.04	6.10
Population	1.79	1.24	1.05	1.02	1.00	0.98	0.95	0.93
Price								
Home & Import Goods Price Index (2000=100)	21.8	11.4	5.4	7.0	6.7	16.7	0.3	-2.0
Consumer Price Index	26.0	3.8	3.1	3.4	4.4	8.7	1.5	N.A.

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

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	1,691,720	-	203,014	-	-	-	-	-	-
Import	83,167	74	237,682	48,262	0	2,667	5,014	2	1,836
Export	-10,356	-2,278	-3,030	-30,460	-5,192	-798	-6,363	-2	-4,733
International Marine Bunkers	-	-	-	-901	-	-	-272	-	-196
International Aviation Bunkers	-	-	-	-2,462	-	-	-2,462	-	-
Stock Changes	-92,907	-11,080	-8,900	-5,120	711	-1,835	-90	-18	791
<b>Total Primary Energy Supply</b>	<b>1,671,623</b>	<b>-13,284</b>	<b>428,766</b>	<b>9,319</b>	<b>-4,481</b>	<b>34</b>	<b>-4,174</b>	<b>-18</b>	<b>-2,302</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-1,127,580</b>	<b>99,460</b>	<b>-418,764</b>	<b>392,389</b>	<b>75,108</b>	<b>17,724</b>	<b>18,790</b>	<b>1,708</b>	<b>151,029</b>
Main Activity Producer	-730,777	-1,219	-37	-5,649	-	-	-	-	-1,161
Autoproducers	-118,643	-18,426	-33	-4,395	-1	-	-	-	-39
Gas Processing	-5,744	-872	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-418,694	439,463	75,109	17,807	18,790	1,735	152,229
Coal Transformation	-272,416	119,976	-	-	-	-	-	-	-
Other Transformation	-	-	-	-37,030	-	-83	-	-27	-
Loss & Own Use	-59,737	-5,123	-6,406	-6,106	-742	-	-	-26	-3,804
Discrepancy	-17,173	-6,187	-361	-8,860	-271	-865	-18	-243	-662
<b>Total Final Energy Consumption</b>	<b>467,133</b>	<b>74,866</b>	<b>3,235</b>	<b>386,742</b>	<b>69,614</b>	<b>16,893</b>	<b>14,598</b>	<b>1,420</b>	<b>144,261</b>
<b>Industry Sector</b>	<b>384,555</b>	<b>69,324</b>	<b>2,174</b>	<b>119,803</b>	<b>8,960</b>	<b>14,232</b>	<b>-</b>	<b>451</b>	<b>22,067</b>
Iron and Steel	54,826	32,075	3	1,879	138	-	-	5	1,010
Chemical & Petrochemical	54,556	20,017	2,123	56,515	675	14,231	-	82	1,894
Non-metallic Minerals	120,319	3,526	25	9,304	386	-	-	12	2,957
Other Industries	154,855	13,705	24	52,105	7,760	1	-	351	16,205
<b>Transport Sector</b>	<b>3,291</b>	<b>1</b>	<b>-</b>	<b>147,899</b>	<b>32,440</b>	<b>-</b>	<b>14,598</b>	<b>1</b>	<b>86,889</b>
Domestic Air Transport	-	-	-	15,481	-	-	14,598	-	265
Road	-	-	-	91,245	27,552	-	-	-	63,149
Rail	3,231	1	-	5,542	83	-	-	1	5,430
Inland Waterways	60	0	-	26,018	1,104	-	-	-	12,216
Pipeline Transport	-	-	-	78	1	-	-	-	1
Non-specified Transport	-	-	-	9,535	3,701	-	-	-	5,828
<b>Other Sector</b>	<b>79,286</b>	<b>5,541</b>	<b>-</b>	<b>83,516</b>	<b>27,986</b>	<b>-</b>	<b>-</b>	<b>968</b>	<b>35,305</b>
Residential	48,464	4,846	-	38,046	12,501	-	-	200	7,861
Commerce and Public Services	10,587	203	-	5,056	1,732	-	-	360	2,005
Agriculture	9,408	318	-	14,127	1,741	-	-	9	12,309
Non-specified Others	10,828	173	-	26,288	12,012	-	-	399	13,129
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>1,061</b>	<b>35,523</b>	<b>228</b>	<b>2,661</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	1,557,291	-	189,490	-	-	-	-	-	-
Import	72,637	-	203,653	47,771	45	2,410	5,936	367	1,873
Export	-11,866	-	-5,073	-28,229	-4,940	-784	-6,245	-2	-4,597
International Marine Bunkers	-	-	-	-1,130	-	-	-501	-	-196
International Aviation Bunkers	-	-	-	-4,389	-	-	-4,389	-	-
Stock Changes	-34,029	-15,266	-6,765	-	-	-	-	-	-
<b>Total Primary Energy Supply</b>	<b>1,584,033</b>	<b>-15,266</b>	<b>381,305</b>	<b>14,023</b>	<b>-4,895</b>	<b>1,625</b>	<b>-5,199</b>	<b>365</b>	<b>-2,920</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-1,042,567</b>	<b>83,308</b>	<b>-371,158</b>	<b>349,738</b>	<b>74,238</b>	<b>22,499</b>	<b>15,529</b>	<b>882</b>	<b>144,195</b>
Main Activity Producer	-713,784	-547	-	-	-	-	-	-	-
Autoproducers	-68,894	-3,719	-64	-8,902	-1	-	-	-	-1,548
Gas Processing	-6,645	-1,090	-	-3	-	-	-	-	-
Petroleum Refineries	-	-	-371,094	358,643	74,239	22,499	15,529	882	145,743
Coal Transformation	-253,244	88,664	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-77,997	-3,125	-6,410	-6,931	-779	-	-	-32	-4,516
Discrepancy	-50,891	-994	-352	-9,798	-6,334	-0	-265	-69	-2,549
<b>Total Final Energy Consumption</b>	<b>412,577</b>	<b>63,923</b>	<b>3,385</b>	<b>347,032</b>	<b>62,229</b>	<b>24,124</b>	<b>10,066</b>	<b>1,147</b>	<b>134,211</b>
<b>Industry Sector</b>	<b>325,395</b>	<b>58,999</b>	<b>2,298</b>	<b>91,860</b>	<b>8,284</b>	<b>24,124</b>	<b>-</b>	<b>367</b>	<b>21,663</b>
Iron and Steel	49,827	19,620	0	2,243	160	-	-	14	1,140
Chemical & Petrochemical	62,838	21,819	2,074	42,493	734	24,124	-	39	2,617
Non-metallic Minerals	137,475	3,256	89	8,909	381	-	-	13	3,234
Other Industries	75,254	14,303	134	38,215	7,009	-	-	301	14,672
<b>Transport Sector</b>	<b>4,207</b>	<b>1</b>	<b>-</b>	<b>132,489</b>	<b>29,162</b>	<b>-</b>	<b>9,592</b>	<b>75</b>	<b>80,498</b>
Domestic Air Transport	-	-	-	10,413	-	-	9,592	-	238
Road	-	-	-	84,016	24,731	-	-	41	58,738
Rail	4,147	1	-	5,834	83	-	-	1	5,723
Inland Waterways	61	0	-	23,551	1,004	-	-	31	10,548
Pipeline Transport	-	-	-	73	1	-	-	-	1
Non-specified Transport	-	-	-	8,602	3,344	-	-	2	5,250
<b>Other Sector</b>	<b>82,975</b>	<b>4,924</b>	<b>-</b>	<b>76,880</b>	<b>24,561</b>	<b>-</b>	<b>474</b>	<b>667</b>	<b>31,626</b>
Residential	53,217	4,293	-	35,095	10,291	-	-	197	6,660
Commerce and Public Services	11,657	172	-	4,512	1,519	-	-	300	1,854
Agriculture	8,026	303	-	13,367	1,731	-	-	8	11,568
Non-specified Others	10,076	156	-	23,905	11,020	-	474	161	11,544
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>1,088</b>	<b>45,803</b>	<b>222</b>	<b>-</b>	<b>-</b>	<b>39</b>	<b>424</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	88,303	62,107	19,253	3,837	18,882	-	-	2,087,116
22,990	3,924	-	-	11,829	15,511	-	-	-	-	477	-	385,173
-9,900	-1,116	-	-	-2,357	-3,752	-	-	-	-	-1,639	-	-51,515
-433	-	-	-	-	-	-	-	-	-	-	-	-901
-	-	-	-	-	-	-	-	-	-	-	-	-2,462
30	-29	-	-	-4,678	-	-	-	-	-	-	-	-118,007
12,687	2,779	-	-	4,794	100,062	62,107	19,253	3,837	18,882	-1,162	-	2,299,404
-	-	-	-	-	-	-	-	-	-	-	-	-
11,821	24,535	12,364	-	79,311	-18,783	-62,107	-19,253	-3,837	-18,883	361,816	70,886	-744,657
-2,044	-	-814	-	-1,629	-16,137	-62,107	-19,253	-3,837	-18,883	327,247	39,036	-491,616
-1,208	-11	-1,934	-	-1,203	-3,795	-	-	-	-	34,569	31,850	-78,872
-	-	-	-	-	1,149	-	-	-	-	-	-	-5,467
25,370	25,227	16,068	-	107,128	-	-	-	-	-	-	-	20,769
-	-	-	-	-	-	-	-	-	-	-	-	-152,440
-10,296	-682	-957	-	-24,985	-	-	-	-	-	-	-	-37,030
-458	-373	-393	-	-309	-14,690	-	-	-	-	-63,943	-10,260	-166,266
-476	-1,122	-237	-	-4,965	-296	-	-	-	1	-17	293	-32,599
23,573	25,818	11,733	-	78,830	66,293	-	-	-	-	296,693	60,919	1,355,881
10,074	5,398	11,733	-	46,889	25,373	-	-	-	-	205,710	41,663	848,602
234	413	1	-	78	1,925	-	-	-	-	39,660	5,915	136,283
3,061	2,194	11,641	-	22,737	12,614	-	-	-	-	27,046	14,804	187,676
3,536	1,327	13	-	1,073	4,167	-	-	-	-	21,057	319	158,716
3,242	1,465	79	-	23,001	6,667	-	-	-	-	117,946	20,624	365,928
13,267	704	-	-	-	9,040	-	-	-	-	6,317	-	166,547
617	1	-	-	-	-	-	-	-	-	-	-	15,481
35	508	-	-	-	8,130	-	-	-	-	-	-	99,374
21	8	-	-	-	-	-	-	-	-	3,422	-	12,196
12,517	181	-	-	-	-	-	-	-	-	-	-	26,078
76	-	-	-	-	152	-	-	-	-	239	-	469
-	7	-	-	-	758	-	-	-	-	2,656	-	12,949
233	19,024	-	-	-	27,469	-	-	-	-	84,667	19,256	299,735
-	17,484	-	-	-	22,466	-	-	-	-	44,072	16,111	174,005
86	872	-	-	-	2,536	-	-	-	-	11,111	933	30,426
11	56	-	-	-	47	-	-	-	-	8,398	22	32,319
135	612	-	-	-	2,421	-	-	-	-	21,086	2,190	62,986
-	693	-	-	31,942	4,411	-	-	-	-	-	-	40,996
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	79,385	52,945	18,277	-	-	-	-	1,897,388
24,072	4,896	-	-	8,172	7,107	-	-	-	-	517	-	331,685
-8,624	-1,019	-	-	-2,018	-2,988	-	-	-	-	-1,495	-	-49,650
-433	-	-	-	-	-	-	-	-	-	-	-	-1,130
-	-	-	-	-	-	-	-	-	-	-	-	-4,389
-	-	-	-	-	-	-	-	-	-	-	-	-56,060
15,015	3,878	-	-	6,154	83,505	52,945	18,277	-	-	-979	-	2,117,844
-	-	-	-	-	-	-	-	-	-	-	-	-
10,594	21,967	10,543	-	49,292	67,969	-52,945	-18,277	-	-	319,460	64,169	-600,303
-	-	-	-	-	-368	-52,945	-18,277	-	-	298,656	35,812	-451,453
-2,937	-13	-2,669	-	-1,734	-20,253	-	-	-	-	20,804	28,357	-52,673
-3	-	-	-	-	88,590	-	-	-	-	-	-	80,852
13,534	21,980	13,212	-	51,026	-	-	-	-	-	-	-	-12,451
-	-	-	-	-	-	-	-	-	-	-	-	-164,579
-	-	-	-	-	-	-	-	-	-	-	-	-
-468	-380	-389	-	-367	-14,689	-	-	-	-	-50,815	-9,064	-169,032
-276	-21	-284	-	-0	-192	-	-	-	-	-5,866	-782	-68,874
24,864	25,443	9,870	-	55,079	136,593	-	-	-	-	261,801	54,322	1,279,634
11,407	4,825	9,808	-	11,383	102,837	-	-	-	-	177,389	35,783	794,561
586	343	-	-	-	71,097	-	-	-	-	34,576	4,908	182,273
3,325	1,967	9,687	-	-	16,565	-	-	-	-	25,001	12,543	183,334
4,111	1,144	27	-	-	5,163	-	-	-	-	18,285	256	173,433
3,385	1,372	94	-	11,383	10,012	-	-	-	-	99,526	18,076	255,521
12,506	656	-	-	-	7,598	-	-	-	-	5,306	-	149,602
582	1	-	-	-	-	-	-	-	-	-	-	10,413
33	473	-	-	-	6,770	-	-	-	-	-	-	90,786
20	7	-	-	-	11	-	-	-	-	2,803	-	12,796
11,799	169	-	-	-	-	-	-	-	-	-	-	23,612
72	-	-	-	-	125	-	-	-	-	201	-	399
-	6	-	-	-	692	-	-	-	-	2,303	-	11,596
215	19,337	-	-	-	26,157	-	-	-	-	79,106	18,539	288,580
-	17,948	-	-	-	21,231	-	-	-	-	41,901	16,013	171,750
81	758	-	-	-	2,725	-	-	-	-	9,776	813	29,655
11	49	-	-	-	-	-	-	-	-	8,083	20	29,799
123	583	-	-	-	2,201	-	-	-	-	19,346	1,693	57,377
737	625	62	-	43,696	-	-	-	-	-	-	-	46,891



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

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	654,004	905,175	1,539,359	1,678,153	1,793,278	1,951,993	2,117,844	2,299,404
Indigenous Production	705,811	865,531	1,426,025	1,536,025	1,637,717	1,816,625	1,897,388	2,087,116
Import	8,436	96,856	184,280	213,760	240,314	254,443	331,685	385,173
Export	-38,922	-64,437	-46,884	-68,359	-63,992	-61,416	-49,650	-51,515
Final Energy Consumption	489,928	634,676	903,638	973,376	1,051,475	1,218,756	1,279,634	1,355,881
Industry	329,825	379,343	527,901	576,843	628,050	754,164	794,561	848,602
Transport	28,776	60,078	104,959	113,132	126,222	145,300	149,602	166,547
Residential	-	81,851	125,945	133,596	141,097	164,445	171,750	174,005
Commerce & Public Services	-	14,140	27,440	25,623	28,109	26,128	29,655	30,426
Others	131,327	99,264	117,393	124,183	127,997	128,719	134,066	136,301
<b>Coal, Coal Products</b>								
Primary Energy Supply	512,155	631,243	1,122,099	1,222,426	1,304,830	1,431,782	1,568,767	1,658,339
Indigenous Production	539,952	649,618	1,143,269	1,239,304	1,322,584	1,471,741	1,557,291	1,691,720
Import	877	1,496	15,686	23,048	30,634	24,770	72,637	83,241
Export	-7,785	-40,130	-18,528	-43,008	-38,343	-32,491	-11,866	-12,634
Transformation Sector	-	-	-676,278	-791,534	-851,530	-906,139	-959,259	-1,028,120
Power Generation	-119,784	-327,372	-583,983	-669,250	-732,685	-743,252	-786,944	-869,064
Final Energy Consumption	338,239	296,805	367,076	375,586	392,470	461,573	476,501	541,999
Industry	224,832	216,937	278,711	293,303	312,198	371,056	384,394	453,879
Transport	11,089	5,540	5,470	4,764	4,504	4,370	4,208	3,292
Residential	-	42,496	57,455	55,217	53,274	58,089	57,509	53,310
Commerce & Public Services	-	4,275	9,674	5,865	5,781	10,737	11,829	10,790
Others	102,319	27,556	15,766	16,437	16,713	17,321	18,561	20,728
<b>Crude Oil</b>								
Primary Energy Supply	117,828	213,834	299,315	322,492	340,351	354,986	381,305	428,766
Indigenous Production	138,448	163,003	181,353	184,766	186,318	195,050	189,490	203,014
Import	2,926	70,267	126,817	145,175	163,160	178,885	203,653	237,682
Export	-24,014	-10,306	-8,067	-6,337	-3,884	-4,238	-5,073	-3,030
Transformation Sector	-	-	-290,621	-310,698	-328,491	-341,051	-371,158	-418,764
Petroleum Refineries	-109,722	-203,057	-290,405	-310,460	-328,326	-340,953	-371,094	-418,694
<b>Petroleum Products</b>								
Primary Energy Supply	-3,389	10,828	19,828	24,481	18,847	15,228	14,023	9,319
Import	4,634	24,960	41,484	44,985	42,412	46,171	47,771	48,262
Export	-7,123	-10,229	-16,710	-15,260	-18,092	-20,235	-28,229	-30,460
Transformation Sector	-	-	264,109	283,070	306,020	319,368	349,738	392,389
Power Generation	-11,140	-15,203	-19,899	-17,577	-13,031	-11,963	-8,902	-10,044
Petroleum Refineries	107,409	198,116	284,152	300,781	319,100	331,352	358,643	439,463
Final Energy Consumption	80,728	187,223	277,903	301,060	318,263	329,241	347,032	386,742
Industry	47,912	62,920	77,324	85,486	84,896	85,153	91,860	119,803
Transport	16,676	51,830	94,924	103,592	116,165	130,122	132,489	147,899
Residential	-	14,615	20,728	22,981	26,064	32,461	35,095	38,046
Commerce & Public Services	-	5,677	9,543	10,354	11,660	3,844	4,512	5,056
Others	16,140	52,181	75,385	78,647	79,477	77,661	83,075	75,938
<b>Natural Gas</b>								
Primary Energy Supply	14,242	22,401	44,665	51,903	65,784	76,025	83,505	100,062
Indigenous Production	14,242	25,323	47,429	54,513	64,462	74,759	79,385	88,303
Import	-	-	-	88	3,743	4,286	7,107	15,511
Export	-	-2,922	-2,764	-2,698	-2,421	-3,021	-2,988	-3,752
Transformation Sector	-	-	2,492	2,374	-1,961	61,374	67,969	-18,783
Power Generation	-680	-4,855	-5,092	-5,482	-9,357	-14,743	-20,621	-19,932
Final Energy Consumption	13,205	24,087	38,454	45,062	53,248	123,698	136,593	66,293
Industry	11,084	14,147	20,241	24,399	28,122	88,727	102,837	25,373
Transport	47	93	863	757	979	5,891	7,598	9,040
Residential	-	4,810	11,103	13,823	16,816	21,087	21,231	22,466
Commerce & Public Services	-	378	1,226	1,475	1,931	1,982	2,725	2,536
Others	2,074	4,659	5,021	4,608	5,401	6,011	2,201	6,879
<b>Electricity</b>								
Power Generation	53,440	116,428	214,823	246,452	282,214	298,152	319,460	361,816
Thermal	42,540	94,348	173,981	201,513	231,622	238,290	260,423	270,571
Hydro	10,900	19,134	34,143	37,478	41,733	50,326	52,945	62,107
Nuclear	-	1,454	4,612	4,764	5,397	5,941	6,092	6,418
Others	-	1,491	2,087	2,698	3,462	3,595	-	22,720
Final Energy Consumption	52,150	90,621	169,807	199,419	229,950	243,839	261,801	296,693
Industry	40,392	59,109	116,274	138,215	162,640	167,819	177,389	205,710
Transport	964	2,419	3,701	4,019	4,574	4,918	5,306	6,317
Residential	-	14,384	24,293	27,964	31,155	37,806	41,901	44,072
Commerce & Public Services	-	3,387	6,470	7,286	7,996	8,750	9,776	11,111
Others	10,794	11,323	19,068	21,934	23,584	24,546	27,429	29,484

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

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	1,135.19	1,262.65	1,303.72	1,311.02	1,317.89	1,324.66	1,331.38	1,338.30
Gross Domestic Product *4								
Real Term (Billions of 2000 Price and 2000 USD)	444.59	1,198.46	1,908.76	2,151.18	2,456.64	2,692.48	2,940.19	3,245.97
Real Term (Billions of 2000 Price and 2000 PPP)	1,108.44	2,987.95	4,758.84	5,363.22	6,124.79	6,712.77	7,330.35	8,092.70
Nominal (Billions of Current USD)	390.28	1,198.46	2,256.90	2,712.94	3,494.04	4,519.51	4,990.22	5,930.53
GDP per Capita *4								
Real Term (2000 Price and 2000 USD)	392	949	1,464	1,641	1,864	2,033	2,208	2,425
Real Term (2000 Price and 2000 PPP)	976	2,366	3,650	4,091	4,647	5,068	5,506	6,047
Nominal (Current USD)	344	949	1,731	2,069	2,651	3,412	3,748	4,431
Nominal GDP & its Components (Billions of Current CNY) *1								
Gross Domestic Product	1,866.78	9,921.46	18,493.74	21,631.44	26,581.03	31,404.54	34,090.28	40,151.28
Household Final Consumption Expenditure, etc.	945.09	4,585.46	7,265.25	8,210.35	9,560.98	11,059.45	12,112.99	14,075.86
General Government Final Consumption Expenditure	263.96	1,566.14	2,639.88	3,052.84	3,590.04	4,175.21	4,569.02	5,335.64
Gross Fixed Capital Formation	482.78	3,384.44	7,423.29	8,795.41	10,394.86	12,808.44	15,667.98	18,361.52
Stock Change	191.92	99.84	362.39	500.00	699.46	1,024.09	778.34	998.87
Exports of Goods and Services	300.07	2,314.32	6,857.71	8,465.21	10,210.83	10,985.15	9,106.44	11,864.23
Imports of Goods and Services	244.27	2,075.29	5,835.08	6,799.47	7,871.70	8,562.22	7,603.16	10,293.02
Real GDP & its Components (Billions of 1990 CNY) *1								
Gross Domestic Product	3,680.56	9,921.46	15,801.70	17,808.51	20,337.32	22,289.71	24,340.36	26,871.76
Household Final Consumption Expenditure, etc.	1,974.01	4,585.46	6,281.05	6,836.66	7,551.80	8,180.77	8,924.94	9,650.17
General Government Final Consumption Expenditure	550.30	1,566.14	2,282.26	2,542.06	2,835.61	3,088.44	3,366.40	3,666.66
Gross Fixed Capital Formation	947.54	3,384.44	6,059.22	6,813.06	7,704.08	8,452.86	10,355.20	11,772.35
Stock Change	372.41	99.84	299.95	392.01	523.77	681.80	521.51	N.A.
Exports of Goods and Services	526.87	2,314.32	6,554.96	8,120.77	9,731.28	10,549.91	9,460.65	12,081.80
Imports of Goods and Services	404.35	2,075.29	5,229.02	6,067.88	6,913.26	7,175.00	7,472.54	8,977.02
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	27.9	15.1	11.5	10.7	9.7	9.3	8.9	8.4
Industry	34.8	45.9	48.2	48.5	48.8	49.0	49.3	50.1
Services, etc.	37.3	39.0	40.4	40.9	41.5	41.7	41.8	41.5
Industrial Production Index (2000=100) *3*4	27.3	100.0	167.6	189.2	217.4	239.0	259.9	0.0
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	62.091	249.203	761.953	968.978	1,220.456	1,430.693	1,201.612	1,577.824
Imports, c.i.f.	53.345	225.094	659.953	791.461	956.116	1,132.567	1,005.923	1,395.099
Balance of Payments (Billions of Current USD) *2								
Trade Balance	9.165	34.474	134.189	217.746	315.381	360.682	249.509	254.180
Current Account	11.997	20.518	134.082	232.746	353.996	412.364	261.120	305.374
Overall Balance	12.047	10.693	250.975	284.651	460.651	479.553	400.508	471.659
Foreign Exchange Rate (CNY/USD) *1	4.7832	8.2785	8.1943	7.9734	7.6075	6.9487	6.8314	6.7703
Purchasing Power Parity (CNY/International Dollar) *1	2.0687	3.3205	3.4476	3.4663	3.6247	3.8228	3.7601	3.9658
Price Indices								
GDP Deflator (2000=100) *4	50.7	100.0	117.0	121.5	130.7	140.9	140.1	149.4
Wholesale Price Index (1995=100) *4	51.8	98.7	108.5	111.8	115.2	123.2	116.5	0.0
Consumer Price Index (1995=100) *4	58.3	99.5	100.9	101.9	105.8	112.0	110.7	0.0
Growth Rate (%)								
Real GDP *4	3.80	8.40	11.30	12.70	14.20	9.60	9.20	10.40
Population *4	1.48	0.79	0.59	0.56	0.52	0.51	0.51	0.52
Price *4								
Wholesale Price Index	4.1	2.8	4.9	3.0	3.1	6.9	-5.4	-100.0
Consumer Price Index	2.1	-1.5	0.8	1.0	3.8	5.9	-1.2	-100.0

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

: PPP means Purchasing Power Parity



## 3.6 Hong Kong, China

## Energy Balance Table of Hong Kong, China

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	-	-	-	-	-	-	-	-	-
Import	6,503	-	-	21,530	414	302	5,432	16	5,362
Export	-0	-	-	-498	-16	-	-141	-	-66
International Marine Bunkers	-	-	-	-9,428	-	-	-	-	-3,314
International Aviation Bunkers	-	-	-	-5,271	-	-	-5,271	-	-
Stock Changes	-278	-	-	-3,130	-8	15	-17	-	39
<b>Total Primary Energy Supply</b>	<b>6,225</b>	<b>-</b>	<b>-</b>	<b>3,202</b>	<b>390</b>	<b>317</b>	<b>2</b>	<b>16</b>	<b>2,022</b>
Transfers	-	-	-	0	-	-	-	-	0
<b>Total Transformation Sector</b>	<b>-6,224</b>	<b>-</b>	<b>-</b>	<b>-354</b>	<b>-</b>	<b>-317</b>	<b>-</b>	<b>-</b>	<b>-14</b>
Main Activity Producer	-6,224	-	-	-37	-	-	-	-	-14
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-317	-	-317	-	-	-
Petroleum Refineries	-	-	-	-	-	-	-	-	-
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-0	-	-	-454	63	-	3	-1	-518
<b>Total Final Energy Consumption</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>2,394</b>	<b>453</b>	<b>-</b>	<b>5</b>	<b>15</b>	<b>1,489</b>
<b>Industry Sector</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>95</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>95</b>
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	0	-	-	95	-	-	-	-	95
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,084</b>	<b>453</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>1,303</b>
Domestic Air Transport	-	-	-	5	-	-	5	-	-
Road	-	-	-	1,872	447	-	-	-	1,102
Rail	-	-	-	0	-	-	-	-	0
Inland Waterways	-	-	-	207	6	-	-	-	201
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>214</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15</b>	<b>91</b>
Residential	-	-	-	63	-	-	-	1	-
Commerce and Public Services	-	-	-	152	-	-	-	14	91
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	-	-	-	-	-	-	-	-	-
Import	7,767	-	-	19,318	404	261	4,845	22	6,196
Export	-0	-	-	-778	-27	-	-133	-	-90
International Marine Bunkers	-	-	-	-9,947	-	-	-	-	-4,259
International Aviation Bunkers	-	-	-	-4,769	-	-	-4,769	-	-
Stock Changes	-613	-	-	-835	-3	27	59	-	-52
<b>Total Primary Energy Supply</b>	<b>7,154</b>	<b>-</b>	<b>-</b>	<b>2,988</b>	<b>374</b>	<b>288</b>	<b>2</b>	<b>22</b>	<b>1,795</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-7,154</b>	<b>-</b>	<b>-</b>	<b>-333</b>	<b>-</b>	<b>-288</b>	<b>-</b>	<b>-</b>	<b>-17</b>
Main Activity Producer	-7,154	-	-	-45	-	-	-	-	-17
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-288	-	-288	-	-	-
Petroleum Refineries	-	-	-	-	-	-	-	-	-
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-0	-	-	-32	69	-	3	-1	-222
<b>Total Final Energy Consumption</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>2,623</b>	<b>443</b>	<b>-</b>	<b>5</b>	<b>22</b>	<b>1,557</b>
<b>Industry Sector</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>308</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>189</b>
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	0	-	-	308	-	-	-	-	189
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,095</b>	<b>443</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>1,280</b>
Domestic Air Transport	-	-	-	5	-	-	5	-	-
Road	-	-	-	1,898	436	-	-	-	1,095
Rail	-	-	-	0	-	-	-	-	0
Inland Waterways	-	-	-	192	7	-	-	-	185
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>220</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22</b>	<b>87</b>
Residential	-	-	-	64	-	-	-	1	-
Commerce and Public Services	-	-	-	157	-	-	-	21	87
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-	0	53	-	-	54
9,582	423	-	-	-	2,850	-	-	-	9	950	-	31,842
-276	-	-	-	-	-	-	-	-	-3	-224	-	-726
-6,114	-	-	-	-	-	-	-	-	-	-	-	-9,428
-	-	-	-	-	-	-	-	-	-	-	-	-5,271
-3,169	10	-	-	-	295	-	-	-	-	-	-	-3,113
23	433	-	-	-	3,145	-	-	0	59	726	-	13,358
-	-	-	-	-	-	-	-	-	-	-	-	0
-23	-	-	-	-	-2,487	-	-	-0	-23	3,297	-	-5,792
-23	-	-	-	-	-2,487	-	-	-0	-	3,293	-	-5,455
-	-	-	-	-	-	-	-	-0	-3	4	-	0
-	-	-	-	-	-	-	-	-	-	-	-	-317
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-20	-	-	-20
-	-	-	-	-	-	-	-	-	-	-418	-	-418
0	-0	-	-	-	-0	-	-	-0	-0	-0	-	-454
-	433	-	-	-	659	-	-	0	37	3,604	-	6,693
-	0	-	-	-	22	-	-	0	-	265	-	382
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	0	-	-	-	22	-	-	0	-	265	-	382
-	324	-	-	-	-	-	-	-	-	61	-	2,145
-	-	-	-	-	-	-	-	-	-	-	-	5
-	324	-	-	-	-	-	-	-	-	-	-	1,872
-	-	-	-	-	-	-	-	-	-	61	-	61
-	-	-	-	-	-	-	-	-	-	-	-	207
-	-	-	-	-	-	-	-	-	-	-	-	-
-	109	-	-	-	637	-	-	0	37	3,278	-	4,166
-	62	-	-	-	365	-	-	-	-	940	-	1,367
-	47	-	-	-	272	-	-	0	33	2,338	-	2,795
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	4	-	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0	65	-	-	65
7,172	417	-	-	-	2,293	-	-	-	7	997	-	30,381
-527	-1	-	-	-	-	-	-	-	-2	-321	-	-1,101
-5,689	-	-	-	-	-	-	-	-	-	-	-	-9,947
-	-	-	-	-	-	-	-	-	-	-	-	-4,769
-929	63	-	-	-	219	-	-	-	-	-	-	-1,229
28	479	-	-	-	2,512	-	-	0	69	676	-	13,400
-	-	-	-	-	-	-	-	-	-	-	-	-
-28	-	-	-	-	-1,861	-	-	-	-28	3,563	-	-5,813
-28	-	-	-	-	-1,861	-	-	-	-	3,551	-	-5,509
-	-	-	-	-	-	-	-	-	-12	12	-	0
-	-	-	-	-	-	-	-	-	-	-	-	-288
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-16	-	-	-16
-	-	-	-	-	-	-	-	-	-	-229	-	-229
118	0	-	-	-	-0	-	-	-0	-0	-438	-	-470
118	479	-	-	-	651	-	-	0	41	3,572	-	6,887
118	-	-	-	-	22	-	-	-	37	270	-	636
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
118	-	-	-	-	22	-	-	-	37	270	-	636
-	368	-	-	-	-	-	-	-	-	60	-	2,155
-	-	-	-	-	-	-	-	-	-	-	-	5
-	368	-	-	-	-	-	-	-	-	-	-	1,898
-	-	-	-	-	-	-	-	-	-	60	-	60
-	-	-	-	-	-	-	-	-	-	-	-	192
-	-	-	-	-	-	-	-	-	-	-	-	-
-	111	-	-	-	630	-	-	0	4	3,242	-	4,096
-	63	-	-	-	366	-	-	-	-	931	-	1,360
-	48	-	-	-	264	-	-	-	4	2,311	-	2,736
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0	-	-	-	0
-	-	-	-	-	-	-	-	-	-	-	-	-

## Major Energy Indicators of Hong Kong, China

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	10,643	15,094	14,094	13,627	13,968	13,402	13,400	13,358
Indigenous Production	-	-	81	93	98	98	65	54
Import	12,918	19,786	25,210	26,740	28,377	26,015	30,381	31,842
Export	-2,123	-1,557	-1,763	-1,577	-1,309	-1,146	-1,101	-726
Final Energy Consumption	6,689	11,204	6,696	6,840	7,106	6,879	6,887	6,693
Industry	1,516	1,714	574	546	656	764	636	382
Transport	3,136	6,088	2,334	2,414	2,429	2,144	2,155	2,145
Residential	-	-	1,220	1,252	1,299	1,289	1,360	1,367
Commerce & Public Services	-	-	2,440	2,629	2,722	2,682	2,736	2,795
Others	2,037	3,401	128	-0	-	-	0	4
<b>Coal, Coal Products</b>								
Primary Energy Supply	6,008	4,125	6,870	6,851	7,480	6,850	7,154	6,225
Indigenous Production	-	-	-	-	-	-	-	-
Import	5,362	3,658	6,826	7,182	7,727	7,146	7,767	6,503
Export	-1	-24	-0	-0	-2	-0	-0	-0
Transformation Sector	-	-	-6,869	-6,851	-7,478	-6,850	-7,154	-6,224
Power Generation	-5,996	-4,121	-6,869	-6,851	-7,478	-6,850	-7,154	-6,224
Final Energy Consumption	12	4	1	0	2	-	0	0
Industry	-	-	1	0	2	-	0	0
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	12	4	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	-	-	-	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-	-	-	-	-	-
<b>Petroleum Products</b>								
Primary Energy Supply	4,790	8,186	4,552	3,971	3,924	3,917	2,988	3,202
Import	7,556	13,245	15,405	16,436	17,666	15,852	19,318	21,530
Export	-1,967	-1,431	-1,377	-1,187	-960	-838	-778	-498
Transformation Sector	-	-	-756	-627	-393	-387	-333	-354
Power Generation	-126	-37	-38	-37	-30	-36	-45	-37
Petroleum Refineries	-	-	-	-	-	-	-	-
Final Energy Consumption	4,304	7,518	2,665	2,790	2,935	2,764	2,623	2,394
Industry	908	1,269	204	191	319	453	308	95
Transport	3,136	6,088	2,210	2,355	2,370	2,084	2,095	2,084
Residential	-	-	33	81	74	68	64	63
Commerce & Public Services	-	-	89	162	171	159	157	152
Others	260	161	128	-	-	-	-	-
<b>Natural Gas</b>								
Primary Energy Supply	-	2,007	2,033	2,164	1,870	1,870	2,512	3,145
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	2,007	2,033	2,185	2,041	2,041	2,293	2,850
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-1,447	-1,583	-1,224	-1,277	-1,861	-2,487
Power Generation	-	-2,007	-2,033	-2,164	-1,621	-1,500	-1,861	-2,487
Final Energy Consumption	324	560	586	581	646	593	651	659
Industry	13	21	19	19	21	19	22	22
Transport	-	-	-	-	-	-	-	-
Residential	-	-	332	324	354	335	366	365
Commerce & Public Services	-	-	235	238	270	238	264	272
Others	311	539	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	2,488	2,694	3,307	3,806	3,937	3,586	3,563	3,297
Thermal	2,488	2,694	3,266	3,760	3,839	3,489	3,551	3,293
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Others	-	-	41	46	98	98	12	4
Final Energy Consumption	2,049	3,121	3,444	3,469	3,523	3,520	3,572	3,604
Industry	596	424	350	335	313	291	270	265
Transport	-	-	123	58	60	60	60	61
Residential	-	-	856	846	870	886	931	940
Commerce & Public Services	-	-	2,116	2,229	2,280	2,282	2,311	2,338
Others	1,454	2,697	-	-0	-	-	-	-

## Major Economic Indicators of Hong Kong, China

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	5.70	6.67	6.81	6.86	6.93	6.98	7.00	7.07
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	115.16	169.12	207.09	221.62	235.78	241.22	234.80	251.17
Real Term (Billions of 2000 Price and 2000 PPP)	119.92	176.11	215.65	230.78	245.53	251.19	244.51	261.55
Nominal (Billions of Current USD)	76.89	169.12	177.77	189.93	207.09	215.36	209.28	224.46
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	20,188	25,374	30,395	32,320	34,044	34,570	33,526	35,536
Real Term (2000 Price and 2000 PPP)	21,023	26,423	31,651	33,656	35,451	35,999	34,912	37,005
Nominal (Current USD)	13,479	25,374	26,092	27,699	29,900	30,865	29,882	31,757
Nominal GDP & its Components (Billions of Current HKD) *1								
Gross Domestic Product	598.95	1,317.65	1,382.59	1,475.36	1,615.57	1,677.01	1,622.32	1,743.86
Household Final Consumption Expenditure, etc.	342.17	777.14	804.94	863.59	972.03	1,022.86	1,012.79	1,085.27
General Government Final Consumption Expenditure	43.14	120.17	121.44	123.03	130.40	139.26	142.85	147.21
Gross Fixed Capital Formation	156.16	347.38	289.17	322.69	325.37	334.35	322.77	374.59
Stock Change	5.73	14.40	-4.76	-2.13	12.84	8.48	22.90	38.95
Exports of Goods and Services	782.38	1,887.70	2,747.14	3,032.41	3,359.70	3,562.63	3,164.58	3,888.11
Imports of Goods and Services	730.62	1,829.14	2,575.33	2,864.24	3,184.76	3,390.57	3,043.57	3,790.26
Real GDP & its Components (Billions of 2000 HKD) *1								
Gross Domestic Product	795.69	1,168.51	1,430.82	1,531.26	1,629.09	1,666.66	1,622.32	1,735.40
Household Final Consumption Expenditure, etc.	513.35	778.87	854.83	905.48	982.80	1,006.21	1,012.79	1,076.03
General Government Final Consumption Expenditure	82.63	123.20	132.81	133.18	137.15	139.60	142.85	146.74
Gross Fixed Capital Formation	180.58	284.98	300.07	321.46	332.53	335.99	322.77	347.94
Stock Change	7.70	16.04	-5.23	-1.55	14.09	8.32	22.90	38.03
Exports of Goods and Services	801.90	1,882.32	2,902.95	3,176.71	3,439.19	3,526.66	3,164.58	3,696.03
Imports of Goods and Services	774.67	1,895.38	2,745.00	2,994.66	3,268.61	3,343.58	3,043.57	3,569.36
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	N.A.	0.1	0.1	0.1	0.1	0.0	0.1	N.A.
Industry	N.A.	12.5	8.5	7.7	7.2	7.2	7.0	N.A.
Services, etc.	N.A.	85.9	87.6	87.3	87.4	87.8	88.5	88.6
Manufacturing Production (2005=100) *2	112.6	94.0	100.0	102.2	100.8	94.0	86.2	89.3
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	82.390	202.683	292.119	322.669	349.386	370.242	329.422	400.692
Imports, c.i.f.	84.725	214.042	300.160	335.754	370.132	392.962	352.241	441.369
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	-8.193	-7.627	-14.033	-19.701	-23.117	-26.862	-42.965
Current Account	N.A.	6.993	20.181	22.928	25.547	29.494	17.963	12.390
Overall Balance	N.A.	10.044	1.378	6.016	14.704	33.948	70.860	9.153
Foreign Exchange Rate (HKD/USD) *1	7.7898	7.7912	7.7773	7.7678	7.8014	7.7868	7.7518	7.7692
Purchasing Power Parity (HKD/International Dollar) *1	6.1349	7.4819	5.6878	5.4941	5.4956	5.4553	5.3646	5.3294
Price Indices								
GDP Deflator (2009=100) *3	75.3	112.8	96.6	96.3	99.2	100.6	100.0	100.5
Producer Price Index (2005=100) *2	103.7	111.2	100.0	102.2	105.3	111.2	109.3	115.9
Consumer Price Index (2005=100) *2	63.6	107.1	100.0	102.1	104.1	108.5	109.2	111.8
Growth Rate (%) *3								
Real GDP	3.90	7.95	7.08	7.02	6.39	2.31	-2.66	6.97
Population	0.32	0.89	0.44	0.64	1.00	0.75	0.37	0.92
Price								
Producer Price Index	N.A.	0.2	-7.9	2.2	3.0	5.6	-1.7	6.0
Consumer Price Index	10.2	-3.7	0.9	2.1	2.0	4.3	0.6	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"

: HKD means Hong Kong Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity



## Energy Price of Hong Kong, China in 2010

## Currency Exchange Rate

Currency Exchange Rate	Local currency / US Dollar	
Local Currency Unit		HK\$

## IMPORT PRICES

## WHOLESALE PRICES

## CONSUMER PRICES

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	HK\$ / t	1,875.00	Anthracite			Anthracite		
Other bituminous coal	HK\$ / t	594.00	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke			Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil			Crude Oil			Crude Oil		
Natural Gas Liquids			Natural Gas Liquids			Natural Gas Liquids		
Ethane			Ethane			Ethane		
LPG	HK\$ / kg	5.95	LPG			LPG	HK\$ / kg	18.14
Naphtha			Naphtha			Naphtha		
Motor Gasoline	HK\$ / l	4.71	Motor Gasoline			Motor Gasoline	HK\$ / l	13.55
Aviation Gasoline			Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel	HK\$ / l	4.41	Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Other Kerosene			Other Kerosene			Other Kerosene		
Gas/Diesel Oil			Gas/Diesel Oil			Gas/Diesel Oil		
Fuel Oil	HK\$ / l	3.58	Fuel Oil			Fuel Oil		
White Spirit SBP			White Spirit SBP			White Spirit SBP		
Lubricants			Lubricants			Lubricants		
Bitumen			Bitumen			Bitumen		
Paraffin Waxes			Paraffin Waxes			Paraffin Waxes		
Petroleum Coke			Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas	HK\$ / kg	2.33	Natural Gas			Natural Gas		
Liquefied Natural Gas			Liquefied Natural Gas			Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas		
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity			Electricity			Industrial		
						Commercial		
						Residential		
						*Average		
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		
Gas oil, diesel oil and naphtha	HK\$ / l	4.39				Environmental diesel oil (road)	HK\$ / l	9.68

## 3.7 Indonesia

## Energy Balance Table of Indonesia

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products				
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene
<b>2010</b>								
Indigenous Production	161,797	-	58,008	-	-	-	-	-
Import	32	-	15,455	23,702	11,480	-	495	8,864
Export	-122,304	-	-20,558	-5,500	-3	-613	-0	-165
International Marine Bunkers	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-
Stock Changes	0	-	-	1,721	-794	-	243	-133
<b>Total Primary Energy Supply</b>	<b>39,525</b>	<b>-</b>	<b>52,904</b>	<b>19,923</b>	<b>10,683</b>	<b>-613</b>	<b>738</b>	<b>-298</b>
Transfers	-	-	-2,777	2,606	-	-	-	-
<b>Total Transformation Sector</b>	<b>-20,233</b>	<b>-38</b>	<b>-49,087</b>	<b>41,329</b>	<b>10,970</b>	<b>613</b>	<b>2,287</b>	<b>2,715</b>
Main Activity Producer	-20,233	-	-	-8,428	-	-	-	-5,983
Autoproducers	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-49,087	52,602	10,970	3,458	2,287	2,715
Coal Transformation	-	-38	-	-	-	-	-	-
Other Transformation	-	-	-	-2,845	-	-2,845	-	-
Loss & Own Use	-	-	-	-34	-	-	-	-5
Discrepancy	-176	38	-1,041	-50	-41	-0	1	-0
<b>Total Final Energy Consumption</b>	<b>19,116</b>	<b>-</b>	<b>-</b>	<b>63,774</b>	<b>21,612</b>	<b>-</b>	<b>3,026</b>	<b>2,412</b>
<b>Industry Sector</b>	<b>19,116</b>	<b>-</b>	<b>-</b>	<b>7,786</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>138</b>
Iron and Steel	197	-	-	-	-	-	-	-
Chemical & Petrochemical	3,709	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-
Other Industries	15,210	-	-	7,786	-	-	-	138
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36,788</b>	<b>20,992</b>	<b>-</b>	<b>3,026</b>	<b>1</b>
Domestic Air Transport	-	-	-	3,029	3	-	3,026	-
Road	-	-	-	33,723	20,988	-	-	-
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	36	-	-	-	1
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12,074</b>	<b>621</b>	<b>-</b>	<b>-</b>	<b>2,273</b>
Residential	-	-	-	7,162	-	-	-	2,065
Commerce and Public Services	-	-	-	3,906	-	-	-	114
Agriculture	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	1,006	621	-	-	94
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,127</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>								
Indigenous Production	150,835	-	54,431	-	-	-	-	-
Import	40	-	18,284	18,856	8,539	-	32	6,601
Export	-116,424	-	-20,376	-	-	-	-	-
International Marine Bunkers	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-
Stock Changes	-1,647	-	976	-	-	-	-	-
<b>Total Primary Energy Supply</b>	<b>32,805</b>	<b>-</b>	<b>53,316</b>	<b>18,856</b>	<b>8,539</b>	<b>-</b>	<b>32</b>	<b>-</b>
Transfers	-	-	-1,118	1,118	-	-	-	-
<b>Total Transformation Sector</b>	<b>-21,539</b>	<b>29</b>	<b>-50,975</b>	<b>32,783</b>	<b>9,609</b>	<b>-</b>	<b>2,212</b>	<b>3,843</b>
Main Activity Producer	-21,503	-	-	-8,188	-	-	-	-5,137
Autoproducers	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-50,975	40,971	9,609	-	2,212	3,843
Coal Transformation	-36	29	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-78	-32	-	-	-8
Discrepancy	-	-0	-1,223	-2,062	762	-	61	119
<b>Total Final Energy Consumption</b>	<b>11,265</b>	<b>29</b>	<b>-</b>	<b>50,616</b>	<b>18,879</b>	<b>-</b>	<b>2,305</b>	<b>3,954</b>
<b>Industry Sector</b>	<b>11,265</b>	<b>29</b>	<b>-</b>	<b>6,347</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>226</b>
Iron and Steel	151	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	4,057	-	-	-	-	-	-	-
Other Industries	7,057	29	-	6,347	-	-	-	226
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30,711</b>	<b>18,879</b>	<b>-</b>	<b>2,305</b>	<b>1</b>
Domestic Air Transport	-	-	-	2,306	1	-	2,305	-
Road	-	-	-	18,336	18,336	-	-	-
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	10,069	542	-	-	1
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,383</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,726</b>
Residential	-	-	-	6,665	-	-	-	3,385
Commerce and Public Services	-	-	-	983	-	-	-	187
Agriculture	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	2,735	-	-	-	155
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,175</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	76,638	1,518	-	8,047	-	-	-	306,007
552	2,311	-	-	-	-	-	-	-	-	-	-	39,190
-96	-16	-	-	-4,406	-31,576	-	-	-	-	-	-	-179,938
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
1,020	-396	-	-	-	-	-	-	-	-	-	-	1,721
1,476	1,899	-	-	-4,406	45,062	1,518	-	8,047	-	-	-	166,980
-	2,606	-	-	-	-	-	-	-	-	-	-	-171
664	926	-	-	11,511	-21,499	-1,518	-	-8,047	-	14,602	-	-44,492
-2,445	-	-	-	-	-7,123	-1,518	-	-8,047	-	14,602	-	-30,747
-	-	-	-	-	-1,650	-	-	-	-	-	-	-1,650
-	-	-	-	-	-12,727	-	-	-	-	-	-	-12,727
3,109	926	-	-	11,511	-	-	-	-	-	-	-	3,515
-	-	-	-	-	-	-	-	-	-	-	-	-38
-	-	-	-	-	-	-	-	-0	-	-	-	-2,845
-	-	-	-	-	-5,880	-	-	-	-	-1,876	-	-7,790
-4	0	-	-	21	-1,543	-	-	-	-	-50	-	-2,822
2,136	5,431	-	-	7,127	16,139	-	-	0	-	12,675	-	111,705
1,810	175	-	-	-	15,976	-	-	-	-	4,385	-	47,262
-	-	-	-	-	502	-	-	-	-	-	-	699
-	-	-	-	-	7,452	-	-	-	-	-	-	11,161
-	-	-	-	-	1,098	-	-	-	-	-	-	1,098
1,810	175	-	-	-	6,924	-	-	-	-	4,385	-	34,304
35	-	-	-	-	10	-	-	-	-	8	-	36,805
-	-	-	-	-	-	-	-	-	-	-	-	3,029
-	-	-	-	-	10	-	-	-	-	-	-	33,733
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-	8	-	44
291	5,256	-	-	-	154	-	-	0	-	8,283	-	20,510
-	5,097	-	-	-	19	-	-	0	-	5,145	-	12,326
-	159	-	-	-	135	-	-	-	-	3,138	-	7,178
-	-	-	-	-	-	-	-	-	-	-	-	-
291	-	-	-	-	-	-	-	-	-	-	-	1,006
-	-	-	-	-	7,127	-	-	-	-	-	-	7,127
-	-	-	-	-	77,022	954	-	7,244	-	-	-	290,486
2,588	1,095	-	-	-	-	-	-	-	-	-	-	37,181
-	-	-	-	-	-32,180	-	-	-	-	-	-	-168,980
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-671
2,588	1,095	-	-	-	44,842	954	-	7,244	-	-	-	158,016
-	1,118	-	-	-	-	-	-	-	-	-	-	-
642	918	-	-	6,649	-15,079	-954	-	-7,244	-	13,074	-	-49,906
-3,051	-	-	-	-	-8,674	-954	-	-7,244	-	13,074	-	-33,489
-	-	-	-	-	-6,406	-	-	-	-	-	-	-6,406
3,693	918	-	-	6,649	-	-	-	-	-	-	-	-10,005
-	-	-	-	-	-	-	-	-	-	-	-	-7
-	-	-	-	-	-	-	-	-	-	-	-	-
-3	-	-	-	-	-13,420	-	-	-	-	-1,294	-	-14,792
-1,796	406	-	-	-3,474	2,344	-	-	-	-	-196	-	-1,136
1,430	3,536	-	-	3,175	18,688	-	-	-	-	11,584	-	92,182
1,212	134	-	-	-	15,509	-	-	-	-	3,974	-	37,124
-	-	-	-	-	1,205	-	-	-	-	-	-	1,356
-	-	-	-	-	5,135	-	-	-	-	-	-	5,135
-	-	-	-	-	1,132	-	-	-	-	-	-	5,189
1,212	134	-	-	-	8,036	-	-	-	-	3,974	-	25,444
24	-	-	-	-	8	-	-	-	-	10	-	30,729
-	-	-	-	-	-	-	-	-	-	-	-	2,306
-	-	-	-	-	8	-	-	-	-	-	-	18,344
-	-	-	-	-	-	-	-	-	-	10	-	10
-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	10,069
195	3,403	-	-	-	121	-	-	-	-	7,600	-	18,104
-	3,281	-	-	-	18	-	-	-	-	4,725	-	11,409
-	122	-	-	-	102	-	-	-	-	2,875	-	3,960
-	-	-	-	-	-	-	-	-	-	-	-	-
195	-	-	-	-	-	-	-	-	-	-	-	2,735
-	-	-	-	-	3,175	3,051	-	-	-	-	-	6,226

## Major Energy Indicators of Indonesia

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	53,252	101,236	130,970	130,520	133,746	157,722	158,016	166,980
Indigenous Production	119,434	183,995	206,158	228,760	238,064	271,799	290,486	306,007
Import	9,999	21,403	41,760	33,291	37,263	33,520	37,181	39,190
Export	-75,853	-103,804	-115,627	-131,531	-144,127	-148,572	-168,980	-179,938
Final Energy Consumption	33,956	63,569	74,750	74,906	88,297	100,345	92,182	111,705
Industry	11,767	22,658	29,104	30,239	35,427	42,244	37,124	47,262
Transport	11,205	21,452	25,858	25,512	26,515	26,025	30,729	36,805
Residential	-	-	13,227	12,449	12,018	11,829	11,409	12,326
Commerce & Public Services	-	-	1,679	1,961	3,712	3,765	3,960	7,178
Others	10,985	19,459	4,883	4,745	10,624	16,483	8,960	8,133
<b>Coal, Coal Products</b>								
Primary Energy Supply	4,056	10,956	23,742	27,315	34,337	40,635	32,805	39,525
Indigenous Production	5,785	44,007	82,754	105,348	121,445	134,652	150,835	161,797
Import	663	272	53	60	38	63	40	32
Export	-2,392	-33,323	-57,745	-78,093	-89,646	-94,080	-116,424	-122,304
Transformation Sector	-	-	-13,959	-15,095	-18,114	-18,257	-21,510	-20,271
Power Generation	-2,252	-10,048	-13,956	-15,092	-18,110	-18,252	-21,503	-20,233
Final Energy Consumption	1,149	2,053	8,499	11,543	16,217	22,378	11,294	19,116
Industry	1,110	1,821	8,486	11,527	16,217	22,378	11,294	19,116
Transport	0	-	-	-	-	-	-	-
Residential	-	-	13	16	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	39	233	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	38,632	49,852	49,041	46,672	44,134	49,601	53,316	52,904
Indigenous Production	70,733	68,981	48,137	48,922	46,073	56,405	54,431	58,008
Import	6,085	10,660	20,471	15,768	15,483	12,839	18,284	15,455
Export	-38,186	-29,789	-19,567	-18,019	-17,633	-20,619	-20,376	-20,558
Transformation Sector	-	-	-44,642	-44,402	-43,789	-47,601	-50,975	-49,087
Petroleum Refineries	-36,471	-49,298	-44,642	-44,402	-43,789	-47,601	-50,975	-49,087
<b>Petroleum Products</b>								
Primary Energy Supply	-8,202	1,171	13,873	11,634	15,292	20,618	18,856	19,923
Import	3,251	10,471	21,235	17,462	21,743	20,618	18,856	23,702
Export	-11,125	-8,942	-7,363	-5,829	-6,284	-	-	-5,500
Transformation Sector	-	-	37,089	37,131	35,908	34,958	32,783	41,329
Power Generation	-3,764	-4,501	-9,259	-8,709	-10,278	-9,692	-8,188	-8,428
Petroleum Refineries	38,041	48,490	46,348	45,840	46,186	44,650	40,971	52,602
Final Energy Consumption	24,681	44,061	45,952	43,021	51,733	54,276	50,616	63,774
Industry	6,317	10,948	10,444	8,717	7,613	6,288	6,347	7,786
Transport	11,203	21,432	25,852	25,507	26,501	26,001	30,711	36,788
Residential	-	-	9,656	8,653	7,932	7,495	6,665	7,162
Commerce & Public Services	-	-	-	143	1,259	1,060	983	3,906
Others	7,161	11,681	0	0	8,428	13,432	5,910	8,133
<b>Natural Gas</b>								
Primary Energy Supply	16,889	34,048	37,710	38,352	32,975	38,731	44,842	45,062
Indigenous Production	41,040	65,798	68,663	67,942	63,537	72,604	77,022	76,638
Import	-	-	-	-	-	-	-	-
Export	-24,151	-31,750	-30,953	-29,590	-30,563	-33,873	-32,180	-31,576
Transformation Sector	-	-	-11,300	-11,659	-11,707	-12,689	-15,079	-21,499
Power Generation	-249	-10,468	-3,423	-3,752	-4,793	-5,961	-8,674	-8,773
Final Energy Consumption	5,504	8,089	11,093	10,657	9,912	12,589	18,688	16,139
Industry	2,862	4,407	6,523	6,244	7,658	9,452	15,509	15,976
Transport	1	20	5	5	6	17	8	10
Residential	-	-	16	16	17	18	18	19
Commerce & Public Services	-	-	24	26	35	50	102	135
Others	2,641	3,662	4,526	4,366	2,197	3,051	3,051	-
<b>Electricity</b>								
Power Generation	3,245	10,561	10,952	11,447	12,250	12,852	13,074	14,602
Thermal	1,369	5,351	9,459	10,053	10,675	11,146	11,307	11,468
Hydro	935	862	925	821	971	991	954	1,518
Nuclear	-	-	-	-	-	-	-	-
Others	941	4,348	568	573	604	715	812	1,616
Final Energy Consumption	2,624	9,365	9,205	9,684	10,435	11,103	11,584	12,675
Industry	1,478	5,482	3,651	3,751	3,939	4,125	3,974	4,385
Transport	1	-	-	-	7	7	10	8
Residential	-	-	3,542	3,763	4,070	4,316	4,725	5,145
Commerce & Public Services	-	-	1,655	1,791	2,418	2,654	2,875	3,138
Others	1,145	3,883	357	379	-	-	-	-

## Major Economic Indicators of Indonesia

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	184.35	213.40	227.30	229.92	232.46	234.95	237.41	239.87
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	109.15	165.02	207.89	219.33	233.24	247.27	258.72	274.74
Real Term (Billions of 2000 Price and 2000 PPP)	328.45	496.57	625.57	659.99	701.86	744.07	778.51	826.75
Nominal (Billions of Current USD)	114.43	165.02	285.87	364.57	432.22	510.23	539.58	708.03
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	592	773	915	954	1,003	1,052	1,090	1,145
Real Term (2000 Price and 2000 PPP)	1,782	2,327	2,752	2,871	3,019	3,167	3,279	3,447
Nominal (Current USD)	621	773	1,258	1,586	1,859	2,172	2,273	2,952
Nominal GDP & its Components (Billions of Current IDR) *1								
Gross Domestic Product	210,866	1,389,770	2,774,281	3,339,217	3,950,893	4,948,688	5,606,203	6,436,271
Household Final Consumption Expenditure, etc.	119,802	856,798	1,785,596	2,092,656	2,510,504	2,999,957	3,290,843	3,641,997
General Government Final Consumption Expenditure	18,649	90,780	224,981	288,080	329,760	416,867	537,589	581,921
Gross Fixed Capital Formation	59,758	275,881	655,854	805,786	985,627	1,370,717	1,744,381	2,065,181
Stock Change	4,911	33,283	39,975	42,382	-1,053	5,822	-7,264	21,448
Exports of Goods and Services	53,409	569,490	945,122	1,036,316	1,162,974	1,475,119	1,354,409	1,580,818
Imports of Goods and Services	50,046	423,318	830,083	855,588	1,003,271	1,422,902	1,197,093	1,475,834
Real GDP & its Components (Billions of 2000 IDR) *1								
Gross Domestic Product	919,241	1,389,770	1,750,815	1,847,127	1,964,327	2,082,456	2,178,850	2,313,838
Household Final Consumption Expenditure, etc.	480,808	856,798	1,043,805	1,076,928	1,130,847	1,191,191	1,249,011	1,306,801
General Government Final Consumption Expenditure	84,219	90,780	134,626	147,564	153,310	169,297	195,834	196,398
Gross Fixed Capital Formation	214,557	275,881	393,501	403,719	441,362	493,822	510,100	553,444
Stock Change	-17,177	33,283	33,508	29,027	-243	2,170	-2,065	7,499
Exports of Goods and Services	301,744	569,490	793,613	868,256	942,431	1,032,278	932,249	1,071,385
Imports of Goods and Services	255,995	423,318	639,702	694,605	757,566	833,342	708,529	830,982
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	19.4	15.6	14.5	14.2	13.8	13.7	13.6	13.2
Industry	41.0	45.9	44.1	43.7	43.0	42.1	41.6	41.1
Services, etc.	39.1	38.5	41.4	42.1	43.2	44.3	44.8	45.8
Manufacturing Production Index (2005=100)	49.0	84.1	100.0	98.4	103.9	107.0	108.3	113.2
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	25.675	65.403	86.996	103.527	118.013	139.606	119.646	158.074
Imports, c.i.f.	21.837	43.595	75.725	80.650	93.101	127.538	93.786	135.323
Balance of Payments (Billions of Current USD) *2								
Trade Balance	5.352	25.042	17.534	29.660	32.754	22.915	30.932	30.627
Current Account	-2.988	7.992	0.278	10.860	10.493	0.125	10.629	5.144
Overall Balance	2.251	3.926	-2.111	14.958	12.706	-1.918	12.506	30.284
Foreign Exchange Rate (IDR/USD) *1	1,842.81	8,421.78	9,704.74	9,159.32	9,141.00	9,698.96	10,389.94	9,090.43
Purchasing Power Parity (IDR/International Dollar) *1	788.60	2,798.73	3,934.26	4,348.23	4,701.47	5,434.60	5,822.38	6,222.79
Price Indices								
GDP Deflator (2000=100) *3	22.9	100.0	158.5	180.8	201.1	237.6	257.3	278.2
Wholesale Price Index (2005=100) *2	16.7	66.2	100.2	113.7	130.4	165.6	162.6	170.5
Consumer Price Index (2005=100) *2	18.4	64.1	100.0	113.1	120.4	132.1	138.5	145.6
Growth Rate (%) *3								
Real GDP	9.00	4.92	5.69	5.50	6.35	6.01	4.63	6.20
Population	1.74	1.32	1.20	1.15	1.11	1.07	1.05	1.03
Price								
Wholesale Price Index	10.0	12.5	16.4	13.5	14.7	27.0	-1.8	4.9
Consumer Price Index	7.8	3.7	10.5	13.1	6.4	9.8	4.8	5.1

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"

: IDR means Rupiah, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.8 Japan



## Energy Balance Table of Japan

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	467	-	757	-	-	-	-	-	-
Import	113,557	521	185,869	43,546	865	20,720	150	543	636
Export	-	-533	-	-17,194	-1,786	-	-1,914	-182	-9,896
International Marine Bunkers	-	-	-	-4,857	-	-	-	-	-94
International Aviation Bunkers	-	-	-	-5,389	-	-	-5,389	-	-
Stock Changes	584	-	-1,190	237	-47	-109	-19	256	109
<b>Total Primary Energy Supply</b>	<b>114,608</b>	<b>-12</b>	<b>185,437</b>	<b>16,342</b>	<b>-968</b>	<b>20,610</b>	<b>-7,172</b>	<b>617</b>	<b>-9,245</b>
Transfers	-	-	-524	452	-	452	-	-	-
<b>Total Transformation Sector</b>	<b>-96,794</b>	<b>27,071</b>	<b>-185,029</b>	<b>164,496</b>	<b>45,062</b>	<b>13,951</b>	<b>11,415</b>	<b>15,956</b>	<b>49,149</b>
Main Activity Producer	-48,103	-4,238	-3,523	-6,449	-	-	-	-4	-139
Autoproducers	-10,423	-3,331	-	-8,272	-	-1,559	-	-24	-1,051
Gas Processing	-	-	-	-1,208	-	-	-	-	-
Petroleum Refineries	-	-	-181,505	181,229	45,062	15,510	11,415	15,984	50,338
Coal Transformation	-38,268	34,640	-	-804	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-476	-3,067	-	-11,813	-	-39	-	-40	-282
Discrepancy	-2,688	-4,022	116	2,048	1,727	-2,156	282	296	1,535
<b>Total Final Energy Consumption</b>	<b>14,651</b>	<b>19,969</b>	<b>-</b>	<b>171,527</b>	<b>45,820</b>	<b>32,818</b>	<b>4,525</b>	<b>16,830</b>	<b>41,156</b>
<b>Industry Sector</b>	<b>14,651</b>	<b>19,362</b>	<b>-</b>	<b>57,423</b>	<b>37</b>	<b>32,818</b>	<b>-</b>	<b>3,186</b>	<b>7,758</b>
Iron and Steel	7,900	18,440	-	1,691	-	-	-	67	364
Chemical & Petrochemical	1,554	61	-	38,002	-	32,741	-	276	651
Non-metallic Minerals	4,182	341	-	1,788	-	-	-	28	410
Other Industries	1,014	520	-	15,941	37	77	-	2,815	6,334
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>79,148</b>	<b>45,783</b>	<b>-</b>	<b>4,525</b>	<b>-</b>	<b>24,953</b>
Domestic Air Transport	-	-	-	4,527	2	-	4,525	-	-
Road	-	-	-	70,243	45,782	-	-	-	23,363
Rail	-	-	-	198	-	-	-	-	198
Inland Waterways	-	-	-	4,181	-	-	-	-	1,392
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>607</b>	<b>-</b>	<b>30,683</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13,644</b>	<b>8,445</b>
Residential	-	12	-	16,723	-	-	-	10,799	-
Commerce and Public Services	-	595	-	8,649	-	-	-	1,117	4,893
Agriculture	-	-	-	3,631	-	-	-	1,634	1,986
Non-specified Others	-	-	-	1,680	-	-	-	95	1,566
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,273</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	654	-	798	-	-	-	-	-	-
Import	98,216	219	182,823	39,163	697	18,114	752	309	272
Export	-	-580	-	-18,473	-797	-2	-2,387	-290	-10,814
International Marine Bunkers	-	-	-	-4,985	-	-	-	-	-116
International Aviation Bunkers	-	-	-	-5,254	-	-	-5,254	-	-
Stock Changes	150	-	2,189	1,904	32	383	36	198	362
<b>Total Primary Energy Supply</b>	<b>99,019</b>	<b>-360</b>	<b>185,809</b>	<b>12,357</b>	<b>-68</b>	<b>18,495</b>	<b>-6,853</b>	<b>217</b>	<b>-10,297</b>
Transfers	-	-	-525	448	-	448	-	-	-
<b>Total Transformation Sector</b>	<b>-86,623</b>	<b>24,377</b>	<b>-185,184</b>	<b>162,241</b>	<b>43,452</b>	<b>13,941</b>	<b>10,923</b>	<b>16,353</b>	<b>48,937</b>
Main Activity Producer	-43,966	-3,368	-3,352	-8,488	-	-	-	-3	-168
Autoproducers	-8,939	-2,513	-	-8,507	-	-1,389	-	-22	-1,698
Gas Processing	-	-	-	-1,028	-	-	-	-	-
Petroleum Refineries	-	-	-181,832	180,900	43,452	15,330	10,923	16,379	50,803
Coal Transformation	-33,717	30,257	-	-636	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-299	-2,711	-	-11,698	-	-41	-	-65	-279
Discrepancy	448	-2,789	-100	2,683	1,830	-1,702	375	212	1,938
<b>Total Final Energy Consumption</b>	<b>12,546</b>	<b>18,517</b>	<b>-</b>	<b>166,030</b>	<b>45,214</b>	<b>31,141</b>	<b>4,445</b>	<b>16,718</b>	<b>40,299</b>
<b>Industry Sector</b>	<b>12,546</b>	<b>17,972</b>	<b>-</b>	<b>54,376</b>	<b>97</b>	<b>31,141</b>	<b>-</b>	<b>3,138</b>	<b>7,395</b>
Iron and Steel	6,340	17,129	-	1,447	-	-	-	61	304
Chemical & Petrochemical	1,312	54	-	36,069	-	31,064	-	251	614
Non-metallic Minerals	4,035	288	-	1,751	-	-	-	26	406
Other Industries	860	501	-	15,109	97	77	-	2,801	6,071
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>77,061</b>	<b>45,117</b>	<b>-</b>	<b>4,445</b>	<b>-</b>	<b>24,441</b>
Domestic Air Transport	-	-	-	4,446	2	-	4,445	-	-
Road	-	-	-	69,044	45,115	-	-	-	22,801
Rail	-	-	-	193	-	-	-	-	193
Inland Waterways	-	-	-	3,378	-	-	-	-	1,447
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>545</b>	<b>-</b>	<b>30,450</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13,580</b>	<b>8,463</b>
Residential	-	14	-	16,097	-	-	-	10,288	-
Commerce and Public Services	-	531	-	9,003	-	-	-	1,572	4,845
Agriculture	-	-	-	3,655	-	-	-	1,626	2,024
Non-specified Others	-	-	-	1,694	-	-	-	93	1,594
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,144</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,159	8,197	76,188	3,371	8,509	-	-	100,648
3,072	14,005	-	-	3,556	82,183	-	-	-	-	-	-	425,676
-2,452	-221	-	-	-744	-	-	-	-	-	-	-	-17,727
-4,740	-	-	-	-23	-	-	-	-	-	-	-	-4,857
-	-	-	-	-	-	-	-	-	-	-	-	-5,389
19	-0	-	-	29	-15	-	-	-	-	-	-	-384
-4,101	13,783	-	-	2,817	85,326	8,197	76,188	3,371	8,509	-	-	497,966
-	-	0	-	-	-	-	-	-	-	-	-	-72
11,850	3,618	7,210	-	6,286	-53,173	-8,197	-76,188	-2,951	-8,984	99,319	816	-139,614
-6,015	-292	-	-	-	-51,089	-7,437	-76,188	-2,280	-1,266	79,793	816	-119,962
-4,058	-93	-1,346	-	-140	-3,222	-760	-	-671	-7,719	19,526	-	-14,872
-	-1,064	-143	-	-	1,138	-	-	-	-	-	-	-70
21,922	5,067	8,699	-	7,231	-	-	-	-	-	-	-	-276
-	-	-	-	-804	-	-	-	-	-	-	-	-4,433
-	-	-	-	-	-	-	-	-	-	-	-	-
-1,175	-956	-7,483	-	-1,838	-3,691	-	-	-	-	-11,688	-	-30,735
-649	692	273	-	48	1,528	-	-	-	2,973	1,147	-78	1,024
5,925	17,137	-	-	7,314	29,990	-	-	420	2,498	88,778	738	328,570
3,106	7,476	-	-	3,042	15,117	-	-	-	2,476	35,835	-	144,863
355	376	-	-	530	1,431	-	-	-	-	6,843	-	36,305
539	3,234	-	-	561	3,420	-	-	-	-	5,452	-	48,489
677	44	-	-	630	755	-	-	-	-	1,722	-	8,788
1,535	3,822	-	-	1,322	9,511	-	-	-	2,476	21,817	-	51,280
2,789	1,098	-	-	-	-	-	-	-	-	1,829	-	80,977
-	-	-	-	-	-	-	-	-	-	-	-	4,527
-	1,098	-	-	-	-	-	-	-	-	-	-	70,243
-	-	-	-	-	-	-	-	-	-	1,829	-	2,027
2,789	-	-	-	-	-	-	-	-	-	-	-	4,181
-	-	-	-	-	-	-	-	-	-	-	-	-
30	8,563	-	-	-	14,873	-	-	420	22	51,114	738	98,457
-	5,924	-	-	-	8,472	-	-	404	22	25,786	31	51,450
-	2,639	-	-	-	6,401	-	-	16	-	25,013	637	41,310
11	-	-	-	-	-	-	-	-	-	316	70	4,017
19	-	-	-	-	-	-	-	-	-	-	-	1,680
-	-	-	-	4,273	-	-	-	-	-	-	-	4,273
-	-	-	-	-	3,326	7,089	71,574	3,556	7,319	-	-	94,316
2,347	13,649	-	-	3,024	75,778	-	-	-	-	-	-	396,200
-3,228	-202	-	-	-753	-	-	-	-	-	-	-	-19,052
-4,849	-	-	-	-19	-	-	-	-	-	-	-	-4,985
-	-	-	-	-	-	-	-	-	-	-	-	-5,254
278	557	-	-	58	15	-	-	-	-	-	-	4,257
-5,451	14,004	-	-	2,309	79,120	7,089	71,574	3,556	7,319	-	-	465,483
-	-	0	-	-	-	-	-	-	-	-	-	-76
11,984	3,661	7,063	-	5,927	-51,237	-7,089	-71,574	-3,101	-7,905	93,972	809	-131,315
-7,799	-518	-	-	-	-49,089	-6,538	-71,574	-2,437	-1,351	78,168	809	-111,185
-3,972	-96	-1,188	-	-142	-3,119	-551	-	-665	-6,555	15,804	-	-15,045
-	-875	-153	-	-	971	-	-	-	-	-	-	-57
23,754	5,149	8,404	-	6,705	-	-	-	-	-	-	-	-932
-	-	-	-	-636	-	-	-	-	-	-	-	-4,095
-	-	-	-	-	-	-	-	-	-	-	-	-
-1,355	-739	-7,492	-	-1,727	-3,396	-	-	-	-	-10,878	-	-28,982
-499	-53	429	-	153	2,902	0	-	0	2,717	-797	-77	4,988
4,679	16,873	-	-	6,662	27,389	-	-	455	2,131	82,297	732	310,098
2,736	7,350	-	-	2,518	13,018	-	-	-	2,109	32,607	-	132,627
433	335	-	-	314	1,464	-	-	-	-	5,977	-	32,357
337	3,290	-	-	514	2,859	-	-	-	-	5,018	-	45,312
628	44	-	-	647	696	-	-	-	-	1,582	-	8,351
1,339	3,681	-	-	1,042	7,998	-	-	-	2,109	20,030	-	46,607
1,930	1,129	-	-	-	-	-	-	-	-	1,802	-	78,863
-	-	-	-	-	-	-	-	-	-	-	-	4,446
-	1,129	-	-	-	-	-	-	-	-	-	-	69,044
-	-	-	-	-	-	-	-	-	-	1,802	-	1,995
1,930	-	-	-	-	-	-	-	-	-	-	-	3,378
-	-	-	-	-	-	-	-	-	-	-	-	-
12	8,395	-	-	-	14,371	-	-	455	22	47,889	732	94,463
-	5,809	-	-	-	8,388	-	-	438	22	24,326	31	49,317
-	2,586	-	-	-	5,983	-	-	17	-	23,268	627	39,430
6	-	-	-	-	-	-	-	-	-	294	74	4,023
7	-	-	-	-	-	-	-	-	-	-	-	1,694
-	-	-	-	4,144	-	-	-	-	-	-	-	4,144

## Major Energy Indicators of Japan

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	435,462	515,793	523,533	520,446	517,970	508,290	465,483	497,966
Indigenous Production	75,776	107,130	99,840	103,974	96,858	89,201	94,316	100,648
Import	376,441	426,211	442,851	443,120	445,398	453,816	396,200	425,676
Export	-5,030	-5,850	-9,753	-10,543	-14,761	-19,899	-19,052	-17,727
Final Energy Consumption	304,887	360,138	355,224	352,865	346,229	335,190	310,098	328,570
Industry	141,050	160,741	155,686	156,195	156,437	151,544	132,627	144,863
Transport	70,004	87,407	86,882	86,199	84,432	80,957	78,863	80,977
Residential	40,322	50,357	52,964	53,074	51,188	50,772	49,317	51,450
Commerce & Public Services	33,985	44,990	45,827	44,675	42,260	41,154	39,430	41,310
Others	19,527	16,643	13,866	12,722	11,912	10,763	9,861	9,970
<b>Coal, Coal Products</b>								
Primary Energy Supply	75,444	91,814	112,739	108,493	114,565	116,994	98,659	114,596
Indigenous Production	5,933	1,720	567	685	722	627	654	467
Import	70,045	91,754	112,761	109,535	115,207	118,120	98,435	114,078
Export	-1,039	-1,489	-1,099	-1,321	-1,073	-650	-580	-532
Transformation Sector	-30,434	-50,261	-68,576	-67,402	-68,932	-70,100	-62,246	-69,723
Power Generation	-24,918	-46,595	-65,071	-63,256	-65,022	-66,236	-58,786	-66,095
Final Energy Consumption	39,591	39,747	36,148	36,562	37,286	36,806	31,063	34,620
Industry	38,825	38,843	35,218	35,579	36,424	36,118	30,518	34,013
Transport	-	-	-	-	-	-	-	-
Residential	83	27	19	19	17	17	14	12
Commerce & Public Services	683	877	911	964	845	671	531	595
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	200,318	218,989	214,674	210,085	209,668	209,081	185,809	185,437
Indigenous Production	555	644	794	779	833	855	798	757
Import	200,268	217,624	212,130	210,313	206,464	210,089	182,823	185,869
Export	-	-	-	-	-	-	-	-
Transformation Sector	-195,130	-217,474	-213,869	-208,901	-208,520	-208,086	-185,184	-185,029
Petroleum Refineries	-176,529	-209,924	-207,953	-202,344	-200,733	-198,647	-181,832	-181,505
<b>Petroleum Products</b>								
Primary Energy Supply	48,733	37,465	29,583	26,379	20,017	13,199	12,357	16,342
Import	64,443	54,074	49,890	50,268	45,290	44,300	39,163	43,546
Export	-3,990	-4,361	-8,654	-9,222	-13,688	-19,249	-18,473	-17,194
Transformation Sector	137,816	180,262	179,707	176,765	173,025	169,829	162,241	164,496
Power Generation	-33,298	-24,474	-24,306	-22,024	-22,933	-24,007	-16,995	-14,721
Petroleum Refineries	174,595	208,447	206,407	200,693	197,676	195,664	180,900	181,229
Final Energy Consumption	183,350	211,805	203,818	197,295	188,175	176,120	166,030	171,527
Industry	63,595	74,731	70,941	68,125	64,954	59,750	54,376	57,423
Transport	68,308	85,531	85,031	84,348	82,603	79,110	77,061	79,148
Residential	16,289	18,647	19,939	19,309	17,934	16,877	16,097	16,723
Commerce & Public Services	15,931	16,672	14,453	13,193	11,185	10,024	9,003	8,649
Others	19,228	16,225	13,454	12,320	11,498	10,359	9,493	9,584
<b>Natural Gas</b>								
Primary Energy Supply	43,525	64,918	70,914	76,040	81,865	84,779	79,120	85,326
Indigenous Production	1,847	2,159	2,855	3,061	3,448	3,482	3,326	3,159
Import	41,684	62,759	68,070	73,004	78,437	81,307	75,778	82,183
Export	-	-	-	-	-	-	-	-
Transformation Sector	-29,102	-42,973	-46,345	-46,816	-52,886	-53,656	-51,237	-53,173
Power Generation	-32,528	-45,995	-48,139	-48,112	-53,983	-54,718	-52,208	-54,310
Final Energy Consumption	13,574	21,610	24,803	27,342	28,227	29,384	27,389	29,990
Industry	3,840	8,359	10,121	12,174	13,740	14,644	13,018	15,117
Transport	-	-	-	-	-	-	-	-
Residential	6,646	8,159	8,513	8,798	8,402	8,567	8,388	8,472
Commerce & Public Services	3,088	5,091	6,169	6,370	6,086	6,173	5,983	6,401
Others	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	72,547	93,482	99,064	99,974	101,388	101,359	93,972	99,319
Thermal	43,158	51,000	56,854	55,958	60,511	63,226	54,297	56,070
Hydro	8,224	8,104	7,488	8,398	7,313	7,017	7,089	8,197
Nuclear	17,008	27,776	25,455	26,433	24,237	21,868	23,858	25,396
Others	4,157	6,602	9,267	9,185	9,328	9,248	8,728	9,656
Final Energy Consumption	64,052	82,913	86,767	87,818	88,606	89,006	82,297	88,778
Industry	31,971	36,332	37,114	37,818	38,710	38,428	32,607	35,835
Transport	1,696	1,875	1,851	1,851	1,829	1,846	1,802	1,829
Residential	16,074	22,665	23,882	24,367	24,281	24,784	24,326	25,786
Commerce & Public Services	14,041	21,711	23,595	23,463	23,453	23,618	23,268	25,013
Others	270	328	325	319	332	329	294	316

## Major Economic Indicators of Japan

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	123.54	126.87	127.77	127.76	127.77	127.70	127.56	127.45
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	4,229.50	4,731.20	5,020.88	5,105.88	5,217.81	5,163.46	4,878.07	5,094.42
Real Term (Billions of 2000 Price and 2000 PPP)	2,945.32	3,294.69	3,496.42	3,555.61	3,633.55	3,595.70	3,396.97	3,547.63
Nominal (Billions of Current USD)	3,103.70	4,731.20	4,571.87	4,356.75	4,356.35	4,849.18	5,035.14	5,488.42
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	34,237	37,292	39,295	39,966	40,837	40,433	38,242	39,972
Real Term (2000 Price and 2000 PPP)	23,842	25,969	27,364	27,831	28,438	28,157	26,631	27,835
Nominal (Current USD)	25,124	37,292	35,781	34,102	34,095	37,972	39,473	43,063
Nominal GDP & its Components (Billions of Current JPY) *1								
Gross Domestic Product	449,392	509,860	503,903	506,687	512,975	501,209	471,139	481,773
Household Final Consumption Expenditure, etc.	234,704	282,772	285,936	289,594	292,523	291,596	279,910	280,713
General Government Final Consumption Expenditure	59,728	86,308	92,468	91,966	92,793	93,019	93,820	95,307
Gross Fixed Capital Formation	143,629	128,515	112,574	114,896	115,781	112,462	97,991	96,776
Stock Change	3,296	-517	635	24	1,606	2,700	-5,340	-1,512
Exports of Goods and Services	46,234	55,459	72,122	81,939	91,037	88,770	59,814	73,183
Imports of Goods and Services	42,149	48,073	65,028	75,572	82,363	87,798	58,088	67,419
Real GDP & its Components (Billions of 2000 JPY) *1								
Gross Domestic Product	424,479	474,830	503,903	512,434	523,667	518,212	489,571	511,284
Household Final Consumption Expenditure, etc.	240,674	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
General Government Final Consumption Expenditure	61,161	82,991	92,468	92,493	93,521	93,403	95,525	97,541
Gross Fixed Capital Formation	126,529	119,223	112,574	114,272	114,631	109,923	98,282	98,097
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	34,651	54,196	72,122	79,287	86,184	87,405	66,257	82,308
Imports of Goods and Services	38,234	54,932	65,028	67,975	69,554	69,795	58,829	65,334
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	1.8	1.5	1.2	1.2	1.2	1.3	1.3	1.1
Industry	33.6	29.7	27.9	28.5	28.9	29.1	26.2	28.5
Services, etc.	64.5	68.5	70.5	69.9	69.6	69.3	72.1	70.0
Industrial Production Index (2005=100) *2	99.1	98.4	100.0	104.4	107.3	103.8	81.7	94.3
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	287.581	479.249	594.941	646.725	714.327	781.412	580.719	769.839
Imports, c.i.f.	235.368	379.511	515.866	579.064	622.243	762.534	551.981	694.059
Balance of Payments (Billions of Current USD) *2								
Trade Balance	69.283	116.716	93.958	81.303	104.752	38.131	43.632	90.973
Current Account	44.078	119.660	165.783	170.517	210.490	156.634	142.194	195.755
Overall Balance	-9.085	48.955	22.325	31.982	36.524	30.880	26.920	43.854
Foreign Exchange Rate (JPY/USD) *1	144.79	107.77	110.22	116.30	117.75	103.36	93.57	87.78
Purchasing Power Parity (JPY/International Dollar) *1	189.40	154.75	129.55	124.72	120.31	116.85	115.04	111.36
Price Indices								
GDP Deflator (2005=100) *3	105.9	107.4	100.0	98.9	98.0	96.7	96.2	94.2
Wholesale Price Index (2005=100) *2	110.8	102.4	100.0	102.2	104.0	108.7	103.0	102.9
Consumer Price Index (2005=100) *2	94.1	102.3	100.0	100.2	100.3	101.7	100.3	99.6
Growth Rate (%) *3								
Real GDP	5.57	2.26	1.30	1.69	2.19	-1.04	-5.53	4.44
Population	0.34	0.17	0.01	-0.01	0.01	-0.05	-0.11	-0.08
Price								
Wholesale Price Index	1.5	0.0	1.7	2.2	1.7	4.6	-5.3	-0.1
Consumer Price Index	3.0	-0.7	-0.3	0.2	0.1	1.4	-1.3	-0.7

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

## Energy Price of Japan in 2010

## Currency Exchange Rate

	Local currency / US Dollar	86.09
<b>Currency Exchange Rate</b>		
<b>Local Currency Unit</b>		Yen

## IMPORT PRICES

## WHOLESALE PRICES

## CONSUMER PRICES

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	Yen/ton	15,060	Coking Coal			Coking Coal		
Anthracite			Anthracite			Anthracite		
Other bituminous coal	Yen/ton	9,773	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke			Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil	Yen/kL	45,398	Crude Oil			Crude Oil		
Natural Gas Liquids			Natural Gas Liquids			Natural Gas Liquids		
Ethane			Ethane			Ethane		
LPG	Yen/ton	66,138	LPG	Yen/kg	134.5	LPG	Yen/m3	713.20
Naphtha	Yen/kL	45,444	Naphtha	Yen/kL	50,027	Naphtha		
Motor Gasoline			Motor Gasoline	Yen/kL	120,921	Motor Gasoline	Yen/L	136.00
Aviation Gasoline			Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel			Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Other Kerosene			Other Kerosene	Yen/kL	68,294	Other Kerosene	Yen/L	86.50
Gas/Diesel Oil			Gas/Diesel Oil	Yen/kL	100,026	Gas/Diesel Oil	Yen/L	116.00
Fuel Oil	Yen/kL	45,833	Fuel Oil	Yen/kL	44,930	Fuel Oil		
White Spirit SBP			White Spirit SBP			White Spirit SBP		
Lubricants			Lubricants			Lubricants		
Bitumen			Bitumen			Bitumen		
Paraffin Waxes			Paraffin Waxes			Paraffin Waxes		
Petroleum Coke			Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas			Natural Gas			Natural Gas		
Liquefied Natural Gas	Yen/ton	50,114	Liquefied Natural Gas			Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas		
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity			Electricity			Industrial		
						Commercial		
						Residential		
						Others		
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		

## 3.9 Republic of Korea

## Energy Balance Table of Republic of Korea

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	959	-	698	-	-	-	-	-	-
Import	72,508	440	121,570	33,027	2	22,889	-	43	312
Export	-	-	-481	-45,315	-4,896	-3,898	-9,577	-856	-17,830
International Marine Bunkers	-	-	-	-9,005	-	-	-	-	-935
International Aviation Bunkers	-	-	-	-4,012	-	-	-4,012	-	-
Stock Changes	-438	-	-795	-574	-46	-79	-35	-82	-46
<b>Total Primary Energy Supply</b>	<b>73,029</b>	<b>440</b>	<b>120,992</b>	<b>-25,879</b>	<b>-4,940</b>	<b>18,912</b>	<b>-13,624</b>	<b>-895</b>	<b>-18,498</b>
Transfers	-	-	-2,695	2,693	846	798	24	-71	88
<b>Total Transformation Sector</b>	<b>-68,312</b>	<b>6,839</b>	<b>-118,785</b>	<b>111,471</b>	<b>12,872</b>	<b>12,806</b>	<b>14,497</b>	<b>4,980</b>	<b>37,381</b>
Main Activity Producer	-46,251	-655	-	-3,355	-	-	-	-73	-33
Autoproducers	-2,505	-2,793	-	-1,693	-	-1,693	-	-	-
Gas Processing	-	-	-	-481	-	-	-	-	-
Petroleum Refineries	-	-	-126,123	123,797	12,872	20,808	14,497	5,053	37,413
Coal Transformation	-19,557	10,287	-	-	-	-	-	-	-
Other Transformation	-	-	7,338	-6,797	-	-6,309	-	-	-
Loss & Own Use	-	-2,359	-18	-5,643	-	-	-	-7	-15
Discrepancy	-311	-33	506	-441	-168	247	-68	-97	-65
<b>Total Final Energy Consumption</b>	<b>4,406</b>	<b>4,887</b>	<b>-</b>	<b>82,201</b>	<b>8,610</b>	<b>32,762</b>	<b>829</b>	<b>3,910</b>	<b>18,890</b>
<b>Industry Sector</b>	<b>4,406</b>	<b>4,032</b>	<b>-</b>	<b>5,902</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>383</b>	<b>1,226</b>
Iron and Steel	878	3,187	-	282	-	-	-	4	5
Chemical & Petrochemical	101	-	-	1,138	-	-	-	-	71
Non-metallic Minerals	2,679	-	-	813	-	-	-	11	89
Other Industries	748	845	-	3,669	-	-	-	368	1,061
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28,738</b>	<b>8,610</b>	<b>-</b>	<b>340</b>	<b>7</b>	<b>14,578</b>
Domestic Air Transport	-	-	-	340	-	-	340	-	-
Road	-	-	-	27,451	8,610	-	-	-	14,068
Rail	-	-	-	184	-	-	-	-	184
Inland Waterways	-	-	-	674	-	-	-	-	244
Pipeline Transport	-	-	-	1	-	-	-	-	1
Non-specified Transport	-	-	-	88	-	-	-	7	80
<b>Other Sector</b>	<b>-</b>	<b>855</b>	<b>-</b>	<b>9,609</b>	<b>-</b>	<b>-</b>	<b>489</b>	<b>3,490</b>	<b>3,086</b>
Residential	-	855	-	2,981	-	-	-	1,704	501
Commerce and Public Services	-	-	-	3,448	-	-	3	1,448	377
Agriculture	-	-	-	1,254	-	-	-	319	850
Non-specified Others	-	-	-	1,925	-	-	486	19	1,358
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>37,952</b>	<b>-</b>	<b>32,762</b>	<b>-</b>	<b>30</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	1,159	-	692	-	-	-	-	-	-
Import	62,744	179	117,637	31,641	-	21,923	-	10	319
Export	-	-	-325	-44,005	-5,001	-3,225	-9,431	-722	-17,106
International Marine Bunkers	-	-	-	-8,398	-	-	-	-	-881
International Aviation Bunkers	-	-	-	-3,689	-	-	-3,689	-	-
Stock Changes	880	-	-2,998	35	-167	205	28	13	-259
<b>Total Primary Energy Supply</b>	<b>64,783</b>	<b>179</b>	<b>115,006</b>	<b>-24,417</b>	<b>-5,168</b>	<b>18,903</b>	<b>-13,093</b>	<b>-699</b>	<b>-17,927</b>
Transfers	-	-	-2,647	2,646	779	945	52	-69	-15
<b>Total Transformation Sector</b>	<b>-61,521</b>	<b>5,435</b>	<b>-114,641</b>	<b>107,471</b>	<b>12,757</b>	<b>11,428</b>	<b>13,759</b>	<b>4,662</b>	<b>36,358</b>
Main Activity Producer	-43,601	-	-	-3,634	-	-	-	-94	-20
Autoproducers	-2,027	-2,306	-	-1,385	-	-1,362	-	-	-
Gas Processing	-	-	-	-240	-	-	-	-	-
Petroleum Refineries	-	-	-122,646	120,283	12,757	19,639	13,759	4,757	36,379
Coal Transformation	-15,893	7,741	-	-	-	-	-	-	-
Other Transformation	-	-	8,005	-7,552	-	-6,849	-	-	-
Loss & Own Use	-	-1,852	-24	-5,323	-	-	-	-7	-19
Discrepancy	749	-1	2,307	-436	-156	261	12	-147	-119
<b>Total Final Energy Consumption</b>	<b>4,010</b>	<b>3,762</b>	<b>-</b>	<b>79,941</b>	<b>8,212</b>	<b>31,537</b>	<b>730</b>	<b>3,741</b>	<b>18,277</b>
<b>Industry Sector</b>	<b>4,010</b>	<b>2,869</b>	<b>-</b>	<b>5,831</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>304</b>	<b>1,118</b>
Iron and Steel	743	2,310	-	259	-	-	-	1	3
Chemical & Petrochemical	13	-	-	1,169	-	-	-	-	69
Non-metallic Minerals	2,620	-	-	826	-	-	-	10	88
Other Industries	634	559	-	3,577	-	-	-	293	958
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28,220</b>	<b>8,212</b>	<b>-</b>	<b>268</b>	<b>6</b>	<b>14,414</b>
Domestic Air Transport	-	-	-	268	-	-	268	-	-
Road	-	-	-	26,846	8,212	-	-	-	13,826
Rail	-	-	-	190	-	-	-	-	190
Inland Waterways	-	-	-	821	-	-	-	-	309
Pipeline Transport	-	-	-	1	-	-	-	-	1
Non-specified Transport	-	-	-	94	-	-	-	6	88
<b>Other Sector</b>	<b>-</b>	<b>893</b>	<b>-</b>	<b>9,261</b>	<b>-</b>	<b>-</b>	<b>462</b>	<b>3,404</b>	<b>2,745</b>
Residential	-	893	-	2,932	-	-	-	1,653	427
Commerce and Public Services	-	-	-	3,396	-	-	1	1,461	289
Agriculture	-	-	-	1,145	-	-	-	273	778
Non-specified Others	-	-	-	1,789	-	-	461	17	1,251
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36,629</b>	<b>-</b>	<b>31,537</b>	<b>-</b>	<b>27</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	485	557	38,724	199	3,340	-	-	44,963
2,672	7,101	-	-	7	39,290	-	-	-	18	-	-	266,854
-3,956	-90	-	-	-4,213	-	-	-	-	-	-	-	-45,797
-8,070	-	-	-	-	-	-	-	-	-	-	-	-9,005
-	-	-	-	-	-	-	-	-	-	-	-	-4,012
-79	-257	-	-	51	-1,090	-	-	-	-	-	-	-2,897
-9,433	6,754	-	-	-4,155	38,685	557	38,724	199	3,358	-	-	250,106
-12	508	540	-	-28	-	-	-	-	-	-	-	-2
16,085	2,463	2,753	-	7,636	-17,641	-557	-38,724	-137	-1,020	42,958	4,580	-79,328
-3,250	-	-	-	-	-17,570	-557	-38,724	-129	-115	40,508	1,658	-65,190
-	-	-	-	-	-435	-	-	-8	-695	2,449	2,922	-2,758
-	-481	-	-	-	365	-	-	-	-	-	-	-116
19,335	3,387	2,753	-	7,680	-	-	-	-	-	-	-	-2,326
-	-	-	-	-	-	-	-	-	-	-	-	-9,270
-	-443	-	-	-44	-	-	-	-	-210	-	-	331
-2,246	-31	-3,292	-	-52	-490	-	-	-	-12	-4,295	-135	-12,952
-43	-177	-	-	-70	-187	-	-	-0	-13	-19	-113	-611
4,351	9,518	-	-	3,332	20,367	-	-	63	2,313	38,644	4,332	157,213
3,347	811	-	-	135	6,872	-	-	1	1,729	19,618	2,338	44,899
208	65	-	-	-	1,600	-	-	-	7	4,237	1	10,192
1,066	-	-	-	-	1,494	-	-	-	88	3,514	1,459	7,793
544	34	-	-	135	451	-	-	-	706	1,011	0	5,660
1,528	712	-	-	-	3,328	-	-	1	928	10,856	878	21,254
429	4,774	-	-	-	1,024	-	-	-	-	188	-	29,950
-	-	-	-	-	-	-	-	-	-	-	-	340
-	4,774	-	-	-	1,024	-	-	-	-	-	-	28,475
-	-	-	-	-	-	-	-	-	-	188	-	373
429	-	-	-	-	-	-	-	-	-	-	-	674
-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	88
575	1,969	-	-	-	12,472	-	-	61	584	18,837	1,994	44,412
156	621	-	-	-	8,941	-	-	21	34	5,271	1,759	19,862
301	1,318	-	-	-	3,526	-	-	40	550	12,703	235	20,503
82	3	-	-	-	4	-	-	-	-	688	-	1,947
36	26	-	-	-	-	-	-	-	-	175	-	2,101
-	1,964	-	-	3,197	-	-	-	-	-	-	-	37,952
-	-	-	-	-	449	485	38,509	160	2,959	-	-	44,413
3,030	6,305	-	-	53	30,212	-	-	-	21	-	-	242,433
-3,948	-9	-	-	-4,563	-	-	-	-	-	-	-	-44,330
-7,517	-	-	-	-	-	-	-	-	-	-	-	-8,398
-	-	-	-	-	-	-	-	-	-	-	-	-3,689
64	236	-	-	-84	1,053	-	-	-	-	-	-	-1,029
-8,371	6,532	-	-	-4,594	31,713	485	38,509	160	2,980	-	-	229,399
47	513	422	-	-27	-	-	-	-	-	-	-	-1
15,250	2,549	2,733	-	7,974	-12,170	-485	-38,509	-108	-757	39,087	4,552	-71,646
-3,520	-	-	-	-	-11,987	-485	-38,509	-103	-117	37,033	1,491	-59,912
-23	-	-	-	-	-407	-	-	-5	-491	2,054	3,061	-1,506
-	-240	-	-	-	224	-	-	-	-	-	-	-16
18,793	3,448	2,733	-	8,018	-	-	-	-	-	-	-	-2,363
-	-	-	-	-	-	-	-	-	-	-	-	-8,152
-	-659	-	-	-44	-	-	-	-	-150	-	-	303
-2,072	-26	-3,155	-	-44	-574	-	-	-	-	-4,214	-117	-12,104
-117	-30	-	-	-141	-846	-	-	-	-0	17	2	1,790
4,737	9,537	-	-	3,168	18,122	-	-	53	2,223	34,890	4,437	147,438
3,613	696	-	-	99	5,632	-	-	1	1,742	17,142	2,703	39,930
223	32	-	-	-	1,375	-	-	-	112	3,554	14	8,367
1,100	-	-	-	-	1,049	-	-	-	126	3,021	1,495	6,873
598	31	-	-	99	444	-	-	-	588	980	-	5,458
1,692	633	-	-	-	2,764	-	-	1	915	9,587	1,195	19,232
512	4,808	-	-	-	895	-	-	-	-	187	-	29,302
-	-	-	-	-	-	-	-	-	-	-	-	268
-	4,808	-	-	-	895	-	-	-	-	-	-	27,741
-	-	-	-	-	-	-	-	-	-	187	-	377
512	-	-	-	-	-	-	-	-	-	-	-	821
-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	94
613	2,037	-	-	-	11,595	-	-	52	481	17,561	1,734	41,577
181	671	-	-	-	8,267	-	-	23	24	4,961	1,541	18,641
302	1,342	-	-	-	3,324	-	-	29	457	11,814	193	19,212
93	1	-	-	-	4	-	-	-	-	626	-	1,774
37	23	-	-	-	-	-	-	-	-	161	-	1,949
-	1,996	-	-	3,069	-	-	-	-	-	-	-	36,629



## Major Energy Indicators of Republic of Korea

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	93,088	188,293	210,578	214,001	222,405	227,363	229,399	250,106
Indigenous Production	22,622	34,582	43,096	43,893	42,683	44,856	44,413	44,963
Import	73,943	206,674	211,301	225,089	229,660	240,077	242,433	266,854
Export	-3,795	-40,939	-35,741	-39,132	-39,344	-44,955	-44,330	-45,797
Final Energy Consumption	64,908	127,112	140,459	141,680	146,833	146,359	147,438	157,213
Industry	19,262	38,474	39,065	40,234	41,710	42,423	39,930	44,899
Transport	14,573	26,266	29,187	29,228	30,222	28,853	29,302	29,950
Residential	12,942	15,036	18,411	18,789	18,453	18,796	18,641	19,862
Commerce & Public Services	8,693	17,211	19,227	17,851	18,356	18,495	19,212	20,503
Others	9,438	30,125	34,570	35,578	38,092	37,792	40,352	42,000
<b>Coal, Coal Products</b>								
Primary Energy Supply	25,558	41,942	49,787	52,976	56,335	63,050	64,962	73,469
Indigenous Production	7,576	3,638	1,261	1,257	1,328	1,276	1,159	959
Import	15,725	39,137	46,929	50,407	54,503	61,507	62,923	72,949
Export	-	-	-	-	-	-	-	-
Transformation Sector	-13,163	-31,590	-41,502	-44,513	-46,279	-51,809	-56,086	-61,473
Power Generation	-5,955	-24,844	-33,117	-36,137	-38,199	-42,963	-47,934	-52,203
Final Energy Consumption	11,717	9,071	7,747	8,350	8,677	9,431	7,772	9,293
Industry	3,052	8,505	6,794	7,246	7,676	8,378	6,879	8,438
Transport	-	-	-	-	-	-	-	-
Residential	8,638	566	954	1,104	1,001	1,053	893	855
Commerce & Public Services	27	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	43,239	126,493	118,805	121,842	122,073	120,052	115,006	120,992
Indigenous Production	-	670	534	571	581	536	692	698
Import	42,672	125,809	117,338	122,758	120,849	118,857	117,637	121,570
Export	-	-99	-3	-2	-27	-243	-325	-481
Transformation Sector	-42,521	-123,376	-118,549	-120,608	-120,640	-118,320	-114,641	-118,785
Petroleum Refineries	-42,521	-128,552	-124,568	-127,444	-128,412	-126,049	-122,646	-126,123
<b>Petroleum Products</b>								
Primary Energy Supply	6,495	-27,455	-26,316	-31,211	-27,621	-30,432	-24,417	-25,879
Import	12,841	24,629	20,897	22,346	24,364	26,340	31,641	33,027
Export	-3,795	-40,840	-35,738	-39,130	-39,317	-44,712	-44,005	-45,315
Transformation Sector	39,028	112,577	110,492	112,844	111,896	111,906	107,471	111,471
Power Generation	-4,512	-8,044	-7,109	-6,695	-7,035	-4,332	-5,020	-5,048
Petroleum Refineries	43,540	125,628	123,436	126,202	126,438	123,787	120,283	123,797
Final Energy Consumption	43,661	79,877	79,650	78,651	80,904	77,935	79,941	82,201
Industry	10,883	10,974	7,972	7,855	7,301	6,463	5,831	5,902
Transport	14,486	26,091	28,639	28,558	29,435	27,946	28,220	28,738
Residential	1,916	3,878	3,181	3,449	3,105	3,150	2,932	2,981
Commerce & Public Services	7,064	9,277	5,915	3,864	3,644	3,310	3,396	3,448
Others	9,313	29,658	33,943	34,926	37,418	37,065	39,562	41,132
<b>Natural Gas</b>								
Primary Energy Supply	2,725	17,011	27,415	28,694	31,131	31,818	31,713	38,685
Indigenous Production	-	-	441	393	317	195	449	485
Import	2,681	17,071	26,112	29,550	29,915	33,347	30,212	39,290
Export	-	-	-	-	-	-	-	-
Transformation Sector	-2,037	-5,757	-11,076	-12,613	-14,318	-14,088	-12,170	-17,641
Power Generation	-2,037	-5,757	-11,076	-12,680	-14,390	-14,289	-12,394	-18,006
Final Energy Consumption	674	10,928	15,986	16,300	16,812	17,582	18,122	20,367
Industry	73	2,882	4,168	4,366	4,710	5,472	5,632	6,872
Transport	-	-	323	452	576	715	895	1,024
Residential	465	6,229	8,374	8,273	8,227	8,237	8,267	8,941
Commerce & Public Services	136	1,806	3,097	3,183	3,296	3,153	3,324	3,526
Others	-	11	24	25	4	5	4	4
<b>Electricity</b>								
Power Generation	9,062	24,951	33,488	34,746	36,749	38,393	39,087	42,958
Thermal	3,921	14,900	19,932	20,961	23,366	24,173	25,051	28,546
Hydro	547	482	446	449	434	478	485	557
Nuclear	4,594	9,465	12,750	12,921	12,416	13,113	12,836	12,908
Others	0	103	359	414	533	628	715	947
Final Energy Consumption	8,117	22,628	30,756	31,936	33,642	34,365	34,890	38,644
Industry	4,970	12,934	15,820	16,294	17,245	17,225	17,142	19,618
Transport	87	175	224	218	211	191	187	188
Residential	1,525	3,191	4,375	4,518	4,661	4,836	4,961	5,271
Commerce & Public Services	1,409	5,873	9,734	10,279	10,854	11,393	11,814	12,703
Others	125	456	603	627	670	721	786	864

## Major Economic Indicators of Republic of Korea

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	42.87	47.01	48.14	48.37	48.60	48.95	49.18	48.88
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	295.60	533.39	664.39	698.80	734.48	751.36	753.76	801.40
Real Term (Billions of 2000 Price and 2000 PPP)	448.02	808.40	1,006.96	1,059.11	1,113.19	1,138.77	1,142.41	1,214.61
Nominal (Billions of Current USD)	263.78	533.39	844.87	951.77	1,049.24	931.41	834.06	1,014.89
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	6,895	11,347	13,802	14,446	15,113	15,350	15,326	16,397
Real Term (2000 Price and 2000 PPP)	10,451	17,197	20,918	21,895	22,906	23,264	23,228	24,851
Nominal (Current USD)	6,153	11,347	17,551	19,676	21,590	19,028	16,959	20,765
Nominal GDP & its Components (Billions of Current KRW) *1								
Gross Domestic Product	186,691	603,236	865,241	908,744	975,013	1,026,452	1,065,037	1,173,275
Household Final Consumption Expenditure, etc.	94,968	330,390	465,431	494,918	530,264	546,734	560,041	598,311
General Government Final Consumption Expenditure	22,054	72,101	120,010	131,901	143,262	156,944	170,325	180,054
Gross Fixed Capital Formation	69,234	180,748	249,690	260,651	278,168	300,794	309,714	335,890
Stock Change	801	3,616	7,176	8,537	8,750	19,575	-29,856	6,013
Exports of Goods and Services	52,187	232,633	339,757	360,625	408,754	544,111	529,645	614,451
Imports of Goods and Services	54,195	215,398	316,378	348,023	394,026	556,198	490,188	581,736
Real GDP & its Components (Billions of 2000 KRW) *1								
Gross Domestic Product	384,963	694,628	865,241	910,049	956,515	978,499	981,625	1,043,666
Household Final Consumption Expenditure, etc.	230,340	387,035	465,431	487,439	512,095	505,603	505,018	525,773
General Government Final Consumption Expenditure	61,477	96,290	120,010	127,909	134,807	140,634	148,472	152,949
Gross Fixed Capital Formation	136,791	214,018	249,690	258,199	269,080	263,848	261,234	279,474
Stock Change	-5,653	5,959	7,176	10,017	8,649	13,159	-17,102	-6,996
Exports of Goods and Services	50,066	212,433	339,757	378,375	426,071	454,249	448,814	514,033
Imports of Goods and Services	77,615	217,624	316,378	352,088	393,207	410,568	377,796	441,693
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	5.4	3.6	3.0	2.9	2.9	2.9	3.0	2.7
Industry	30.5	31.6	33.8	34.3	34.6	34.5	34.1	35.7
Services, etc.	55.8	54.2	52.9	52.5	52.5	52.7	53.1	51.7
Industrial Production Index (2005=100) *2	31.8	74.3	100.0	108.4	115.9	119.8	119.7	139.1
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	65.016	172.267	284.419	325.465	371.489	422.007	363.534	466.384
Imports, c.i.f.	69.844	160.481	261.238	309.383	356.846	435.275	323.085	425.212
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-2.167	18.735	32.840	31.497	37.177	5.174	37.862	41.876
Current Account	-1.390	14.803	18.607	14.083	21.770	3.197	32.791	28.214
Overall Balance	-1.208	23.790	19.864	22.090	15.109	-56.447	68.652	27.172
Foreign Exchange Rate (KRW/USD) *1	707.76	1,130.96	1,024.12	954.79	929.26	1,102.05	1,276.93	1,156.06
Purchasing Power Parity (KRW/International Dollar) *1	547.08	746.21	788.92	774.82	768.65	785.72	804.11	824.57
Price Indices								
GDP Deflator (2005=100) *3	48.5	86.8	100.0	99.9	101.9	104.9	108.5	112.4
Producer Price Index (2005=100)*2	64.8	91.0	100.0	100.9	102.3	111.1	110.9	115.1
Consumer Price Index (2005=100) *2	51.7	84.9	100.0	102.2	104.8	109.7	112.8	116.1
Growth Rate (%) *3								
Real GDP	9.16	8.49	3.96	5.18	5.11	2.30	0.32	6.32
Population	1.15	0.84	0.21	0.49	0.47	0.72	0.48	-0.62
Price								
Producer Price Index	4.2	2.0	2.1	0.9	1.4	8.6	-0.2	3.8
Consumer Price Index	8.6	2.3	2.8	2.2	2.5	4.7	2.8	2.9

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"

: KRW means Won, USD means United States Dollar

: PPP means Purchasing Power Parity

Energy Price of Republic of Korea in 2010

Currency Exchange Rate

	Local currency / US Dollar	1108.1
<b>Currency Exchange Rate</b>		
<b>Local Currency Unit</b>		Won

IMPORT PRICES

WHOLESALE PRICES

CONSUMER PRICES

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/t	134.6	Coking Coal			Coking Coal		
Anthracite	USD/t	137.1	Anthracite			Anthracite		
Other bituminous coal	USD/t	97.7	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke			Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil	USD/bbl	78.7	Crude Oil			Crude Oil		
Natural Gas Liquids			Natural Gas Liquids			Natural Gas Liquids		
Ethane			Ethane			Ethane		
LPG	USD/bbl	61.9	LPG			LPG	Won/kg	1,812.7
Naphtha	USD/bbl	80.4	Naphtha			Naphtha		
Motor Gasoline			Motor Gasoline			Motor Gasoline (ULG 95)	Won/litre	1,710.4
Aviation Gasoline	USD/bbl	69.6	Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel			Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Other Kerosene	USD/bbl	102.5	Other Kerosene			Other Kerosene	Won/litre	1,076.2
Gas/Diesel Oil	USD/bbl	93.5	Gas/Diesel Oil			Gas/Diesel Oil (HSD)	Won/litre	1,502.8
Fuel Oil	USD/bbl	74.1	Fuel Oil			Fuel Oil (1500)	Won/litre	772.3
White Spirit SBP			White Spirit SBP			White Spirit SBP	Won/litre	689.4
Lubricants			Lubricants			Lubricants		
Bitumen			Bitumen			Bitumen	Won/litre	592.5
Paraffin Waxes			Paraffin Waxes			Paraffin Waxes		
Petroleum Coke			Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas			Natural Gas			Natural Gas	Won/m3	775.3
Liquefied Natural Gas	USD/t	521.6	Liquefied Natural Gas			Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas		
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity			Electricity			Industrial		
						Commercial		
						Residential		
						Others		
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		
						Fuel Wood		
						Charcoal		
						Paddy Husk		
						Bagasse		
						Agricultural waste		

## 3.10 Malaysia

## Energy Balance Table of Malaysia

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products				
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene
<b>2010</b>								
Indigenous Production	1,293	-	35,341	-	-	-	-	-
Import	11,188	-	7,985	10,351	4,311	-	401	151
Export	-53	-	-17,247	-8,416	-10	-	-727	-439
International Marine Bunkers	-	-	-	-59	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-
Stock Changes	68	-	-336	441	1,109	-	-216	-1
<b>Total Primary Energy Supply</b>	<b>12,496</b>	<b>-</b>	<b>25,743</b>	<b>2,317</b>	<b>5,409</b>	<b>-</b>	<b>-542</b>	<b>-289</b>
Transfers	-	-	-3,200	3,200	-	-	-	43
<b>Total Transformation Sector</b>	<b>-11,084</b>	<b>-</b>	<b>-22,645</b>	<b>20,441</b>	<b>3,870</b>	<b>-</b>	<b>2,888</b>	<b>475</b>
Main Activity Producer	-11,084	-	-	-540	-	-	-	-415
Autoproducers	-	-	-	-201	-	-	-	-201
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-22,645	21,182	3,870	-	2,888	475
Coal Transformation	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-1,681	-	-	-	-
Discrepancy	151	-	102	107	274	-	31	-209
<b>Total Final Energy Consumption</b>	<b>1,563</b>	<b>-</b>	<b>-</b>	<b>24,383</b>	<b>9,554</b>	<b>-</b>	<b>2,378</b>	<b>19</b>
<b>Industry Sector</b>	<b>1,563</b>	<b>-</b>	<b>-</b>	<b>2,795</b>	<b>84</b>	<b>-</b>	<b>-</b>	<b>6</b>
Iron and Steel	47	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	1,516	-	-	-	-	-	-	-
Other Industries	-	-	-	2,795	84	-	-	6
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16,551</b>	<b>9,470</b>	<b>-</b>	<b>2,378</b>	<b>-</b>
Domestic Air Transport	-	-	-	-	-	-	-	-
Road	-	-	-	9,470	9,470	-	-	-
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	7,081	-	-	2,378	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,003</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13</b>
Residential	-	-	-	712	-	-	-	13
Commerce and Public Services	-	-	-	1,244	-	-	-	-
Agriculture	-	-	-	1,048	-	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,034</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>								
Indigenous Production	1,171	-	34,771	-	-	-	-	-
Import	7,797	-	5,787	6,180	3,297	-	56	145
Export	-102	-	-12,378	-7,825	-	-	-781	-590
International Marine Bunkers	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-
Stock Changes	164	-	41	-	-	-	-	-
<b>Total Primary Energy Supply</b>	<b>9,030</b>	<b>-</b>	<b>28,222</b>	<b>-1,645</b>	<b>3,297</b>	<b>-</b>	<b>-725</b>	<b>-445</b>
Transfers	-	-	-1,902	1,902	-	-	-	33
<b>Total Transformation Sector</b>	<b>-7,698</b>	<b>-</b>	<b>-26,363</b>	<b>17,547</b>	<b>4,049</b>	<b>-</b>	<b>3,082</b>	<b>555</b>
Main Activity Producer	-7,698	-	-	-589	-	-	-	-384
Autoproducers	-	-	-	-92	-	-	-	-92
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-26,505	18,228	4,049	-	3,082	555
Coal Transformation	-	-	-	-	-	-	-	-
Other Transformation	-	-	142	-	-	-	-	-
Loss & Own Use	-	-	-	-2,868	-	-	-	-
Discrepancy	47	-	43	7,820	1,414	-	-246	-115
<b>Total Final Energy Consumption</b>	<b>1,378</b>	<b>-</b>	<b>-</b>	<b>22,757</b>	<b>8,760</b>	<b>-</b>	<b>2,112</b>	<b>29</b>
<b>Industry Sector</b>	<b>1,378</b>	<b>-</b>	<b>-</b>	<b>4,433</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>15</b>
Iron and Steel	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	1,378	-	-	-	-	-	-	-
Other Industries	-	-	-	4,433	98	-	-	15
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15,853</b>	<b>8,661</b>	<b>-</b>	<b>2,112</b>	<b>-</b>
Domestic Air Transport	-	-	-	2,112	-	-	2,112	-
Road	-	-	-	8,661	8,661	-	-	-
Rail	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	5,081	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>597</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>14</b>
Residential	-	-	-	14	-	-	-	14
Commerce and Public Services	-	-	-	394	-	-	-	-
Agriculture	-	-	-	189	1	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,873</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	47,936	540	-	0	-	-	-	85,110
1,187	460	-	-	608	4,730	-	-	-	-	-	-	34,254
-945	-728	-	-	-3,075	-24,162	-	-	-	-	-13	-	-49,891
-23	-	-	-	-4	-	-	-	-	-	-	-	-59
-	-	-	-	-	-	-	-	-	-	-	-	-
-33	-289	-	-	-40	-	-	-	-	-	-	-	172
187	-557	-	-	-2,511	28,504	540	-	0	-	-13	-	69,587
-	2,748	-	-	312	-	-	-	-	-	-	-	0
201	696	209	-	4,353	-22,550	-540	-	-0	-	9,786	-	-26,592
-125	-	-	-	-	-14,559	-540	-	-	-	9,399	-	-17,324
-	-	-	-	-	-883	-	-	-0	-	387	-	-697
-	-	-	-	-	-2,423	-	-	-	-	-	-	-2,423
326	696	209	-	4,353	-	-	-	-	-	-	-	-1,463
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-4,685	-	-	-	-	-	-	-4,685
-16	-	-209	-	-1,457	-	-	-	-	-	-796	-	-2,477
104	30	-	-	-41	-599	-	-	-	-	12	-	-227
477	2,917	-	-	657	5,355	-	-	-	-	8,989	-	40,290
418	232	-	-	-	3,691	-	-	-	-	3,992	-	12,041
-	-	-	-	-	-	-	-	-	-	-	-	47
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1,516
418	232	-	-	-	3,691	-	-	-	-	3,992	-	10,478
12	-	-	-	-	211	-	-	-	-	18	-	16,780
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	211	-	-	-	-	-	-	9,681
-	-	-	-	-	-	-	-	-	-	18	-	18
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	7,081
47	1,309	-	-	-	31	-	-	-	-	4,979	-	8,013
-	698	-	-	-	5	-	-	-	-	1,936	-	2,652
37	610	-	-	-	26	-	-	-	-	3,019	-	4,289
10	-	-	-	-	-	-	-	-	-	24	-	1,072
-	-	-	-	-	-	-	-	-	-	-	-	-
-	1,377	-	-	657	1,422	-	-	-	-	-	-	3,456
-	-	-	-	-	47,588	574	-	1	365	-	-	84,469
-	394	-	-	313	4,329	-	-	-	-	1	-	24,095
-	-1,517	-	-	-3,523	-22,314	-	-	-	-145	-9	-	-42,772
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	205
-	-1,124	-	-	-3,210	29,603	574	-	1	219	-8	-	65,996
-	1,477	-	-	287	-	-	-	-	-	-	-	-0
-205	731	402	-	-	-19,175	-574	-	-1	-223	9,211	-	-27,275
-205	-	-	-	-	-11,467	-574	-	-1	-26	8,546	-	-11,809
-	-	-	-	-	-1,186	-	-	-	-197	665	-	-810
-	-	-	-	-	-6,522	-	-	-	-	-	-	-6,522
-	731	402	-	-	-	-	-	-	-	-	-	-8,277
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	142
-	-	-402	-	-2,466	-4,602	-	-	-	-	-798	-	-8,268
1,495	53	-	-	6,188	-0	-	-	-	3	-123	-	7,791
1,290	1,138	-	-	799	5,826	-	-	-	-	8,283	-	38,244
1,195	63	-	-	-	3,891	-	-	-	-	3,717	-	13,419
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1,378
1,195	63	-	-	-	3,891	-	-	-	-	3,717	-	12,041
21	-	-	-	-	202	-	-	-	-	11	-	16,066
-	-	-	-	-	-	-	-	-	-	-	-	2,112
-	-	-	-	-	202	-	-	-	-	-	-	8,863
-	-	-	-	-	-	-	-	-	-	11	-	11
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	5,081
73	-	-	-	-	23	-	-	-	-	4,555	-	5,175
-	-	-	-	-	2	-	-	-	-	1,791	-	1,807
66	-	-	-	-	22	-	-	-	-	2,743	-	3,159
7	-	-	-	-	-	-	-	-	-	21	-	210
-	-	-	-	-	-	-	-	-	-	-	-	-
-	1,075	-	-	799	1,709	-	-	-	-	-	-	3,582

## Major Energy Indicators of Malaysia

ktoe

	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	20,972	51,492	61,261	58,846	63,814	77,842	65,996	69,587
Indigenous Production	46,529	79,473	91,500	87,089	88,576	96,211	84,469	85,110
Import	9,708	16,271	23,687	24,493	30,167	28,701	24,095	34,254
Export	-35,090	-43,637	-54,323	-52,868	-54,236	-46,337	-42,772	-49,891
Final Energy Consumption	13,146	29,697	37,536	38,912	42,133	44,354	38,244	40,290
Industry	5,276	11,401	14,960	15,911	16,210	18,667	13,419	12,041
Transport	5,386	12,070	15,319	14,799	14,783	16,378	16,066	16,780
Residential	-	-	2,181	2,360	2,420	2,680	1,807	2,652
Commerce & Public Services	-	-	2,948	3,062	3,784	3,520	3,159	4,289
Others	2,484	6,226	2,128	2,780	4,936	3,109	3,792	4,528
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,355	2,308	6,620	6,020	7,570	8,114	9,030	12,496
Indigenous Production	70	242	408	486	492	676	1,171	1,293
Import	1,424	1,943	6,277	5,829	7,203	8,310	7,797	11,188
Export	-28	-19	-42	-60	-233	-176	-102	-53
Transformation Sector	-	-	-5,260	-5,095	-6,400	-6,894	-7,698	-11,084
Power Generation	-813	-1,495	-5,260	-5,095	-6,400	-6,894	-7,698	-11,084
Final Energy Consumption	513	991	1,280	1,141	1,163	1,464	1,378	1,563
Industry	513	991	1,280	1,141	1,163	1,464	1,378	1,563
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	10,024	24,137	28,655	27,417	28,983	31,588	28,222	25,743
Indigenous Production	30,629	33,835	38,603	36,601	36,565	37,872	34,771	35,341
Import	2,244	7,709	8,242	8,043	9,597	8,565	5,787	7,985
Export	-22,949	-17,254	-19,073	-17,330	-17,023	-14,994	-12,378	-17,247
Transformation Sector	-	-	-24,551	-24,971	-26,667	-26,740	-26,363	-22,645
Petroleum Refineries	-9,980	-22,164	-24,551	-24,971	-26,667	-26,740	-26,505	-22,645
<b>Petroleum Products</b>								
Primary Energy Supply	2,454	-1,922	-926	-1,531	-1,968	-2,329	-1,645	2,317
Import	6,031	6,619	7,954	7,726	8,445	7,370	6,180	10,351
Export	-3,413	-8,533	-8,417	-9,520	-9,768	-9,517	-7,825	-8,416
Transformation Sector	-	-	20,774	21,795	23,840	25,917	17,547	20,441
Power Generation	-2,989	-966	-575	-820	-596	-542	-681	-741
Petroleum Refineries	10,414	20,954	21,349	23,459	25,280	26,459	18,228	21,182
Final Energy Consumption	9,825	19,581	22,995	22,361	23,898	24,433	22,757	24,383
Industry	3,481	5,278	5,496	5,129	6,059	5,262	4,433	2,795
Transport	5,386	12,059	15,228	14,689	14,646	16,175	15,853	16,551
Residential	-	-	782	842	818	1,007	14	712
Commerce & Public Services	-	-	755	765	1,264	893	394	1,244
Others	958	2,244	733	937	1,111	1,097	2,062	3,082
<b>Natural Gas</b>								
Primary Energy Supply	6,801	26,370	26,414	26,386	28,866	39,869	29,603	28,504
Indigenous Production	15,487	44,797	51,992	49,449	50,961	57,022	47,588	47,936
Import	-	-	1,213	2,895	4,922	4,447	4,329	4,730
Export	-8,686	-17,831	-26,791	-25,957	-27,016	-21,600	-22,314	-24,162
Transformation Sector	-	-	-19,189	-17,507	-18,930	-27,982	-19,175	-22,550
Power Generation	-1,361	-12,110	-11,948	-11,982	-12,330	-14,304	-12,653	-15,441
Final Energy Consumption	1,093	3,862	6,322	8,142	9,392	10,474	5,826	5,355
Industry	452	2,327	4,815	6,168	5,403	8,257	3,891	3,691
Transport	-	7	86	105	133	189	202	211
Residential	-	-	5	4	5	6	2	5
Commerce & Public Services	-	-	21	21	25	30	22	26
Others	641	1,528	1,395	1,844	3,825	1,993	1,709	1,422
<b>Electricity</b>								
Power Generation	1,979	5,952	7,508	7,721	8,714	9,563	9,211	9,786
Thermal	1,636	5,353	7,011	7,167	8,156	8,922	8,414	9,246
Hydro	343	599	497	554	558	642	574	540
Nuclear	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	223	0
Final Energy Consumption	1,715	5,263	6,940	7,268	7,680	7,983	8,283	8,989
Industry	830	2,805	3,369	3,473	3,585	3,685	3,717	3,992
Transport	-	4	5	5	3	15	11	18
Residential	-	-	1,394	1,514	1,597	1,667	1,791	1,936
Commerce & Public Services	-	-	2,171	2,276	2,494	2,597	2,743	3,019
Others	885	2,454	-	-	-	19	21	24

## Major Economic Indicators of Malaysia

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	18.21	23.41	26.10	26.59	27.05	27.50	27.95	28.40
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	47.21	93.79	118.22	125.14	133.25	139.65	137.37	147.25
Real Term (Billions of 2000 Price and 2000 PPP)	106.73	212.06	267.30	282.94	301.27	315.76	310.59	332.93
Nominal (Billions of Current USD)	44.02	93.79	137.95	156.60	186.77	222.57	192.92	237.80
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	2,593	4,006	4,530	4,707	4,926	5,078	4,915	5,185
Real Term (2000 Price and 2000 PPP)	5,862	9,057	10,241	10,642	11,137	11,481	11,113	11,723
Nominal (Current USD)	2,418	4,006	5,286	5,890	6,904	8,093	6,902	8,373
Nominal GDP & its Components (Billions of Current MYR) *1								
Gross Domestic Product	119.08	356.40	522.45	574.44	642.05	742.47	679.94	765.96
Household Final Consumption Expenditure, etc.	61.69	155.94	234.23	258.28	293.04	335.21	339.40	367.99
General Government Final Consumption Expenditure	16.43	36.23	64.52	68.61	78.40	91.86	95.92	97.51
Gross Fixed Capital Formation	39.35	90.14	107.19	119.21	138.39	145.41	137.50	155.59
Stock Change	-0.81	5.62	-2.77	-1.72	0.01	-1.95	-39.29	8.44
Exports of Goods and Services	88.76	427.00	613.69	669.51	706.38	766.10	655.34	745.31
Imports of Goods and Services	86.24	358.53	494.41	539.44	574.17	594.16	508.93	608.89
Real GDP & its Components (Billions of 1987 MYR) *1								
Gross Domestic Product	179.38	356.40	449.25	475.53	506.34	530.68	522.00	559.55
Household Final Consumption Expenditure, etc.	90.51	155.94	216.25	230.95	255.26	277.54	279.36	297.60
General Government Final Consumption Expenditure	21.58	36.23	58.40	61.33	65.38	71.88	74.67	75.01
Gross Fixed Capital Formation	49.62	90.14	99.27	106.75	116.75	118.08	111.52	122.44
Stock Change	-1.16	5.62	-3.08	0.26	-0.77	-5.47	-14.39	11.89
Exports of Goods and Services	133.15	427.00	554.26	590.78	614.82	625.37	559.54	614.99
Imports of Goods and Services	121.42	358.53	475.84	514.54	545.10	556.72	488.69	562.38
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	15.7	8.6	8.0	7.9	7.5	7.5	7.7	7.3
Industry	41.8	48.3	46.5	45.9	44.4	42.7	40.4	40.9
Services, etc.	42.2	43.1	45.5	46.2	48.0	49.8	51.9	51.8
Industrial Production Index (2005=100) *2	31.6	78.4	100.0	105.0	107.3	108.1	99.9	107.1
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	29.452	98.229	140.980	160.676	176.211	199.516	157.433	198.612
Imports, c.i.f.	29.258	81.963	114.625	131.152	146.982	156.896	123.832	164.622
Balance of Payments (Billions of Current USD) *2								
Trade Balance	2.525	20.827	33.156	37.441	37.727	51.261	40.254	41.672
Current Account	-0.870	8.488	19.980	26.200	29.770	38.914	31.801	27.291
Overall Balance	1.951	-1.009	3.620	6.864	13.144	-3.450	3.918	-0.037
Foreign Exchange Rate (MYR/USD) *1	2.7049	3.8000	3.7871	3.6682	3.4376	3.3358	3.5245	3.2211
Purchasing Power Parity (MYR/International Dollar) *1	1.3705	1.6807	1.7339	1.7449	1.7799	1.9214	1.7700	1.8390
Price Indices								
GDP Deflator (2000=100) *3	66.4	100.0	116.3	120.8	126.8	139.9	130.3	136.9
Producer Price Index (2005=100) *2	61.2	83.8	100.0	106.7	112.6	124.0	115.0	121.4
Consumer Price Index (2005=100) *2	64.7	91.7	100.0	103.6	105.7	111.5	112.1	114.0
Growth Rate (%) *3								
Real GDP	9.01	8.86	5.33	5.85	6.48	4.81	-1.64	7.19
Population	2.85	2.39	1.99	1.86	1.75	1.67	1.63	1.62
Price								
Producer Price Index	0.9	3.1	6.9	6.7	5.5	10.2	-7.3	5.6
Consumer Price Index	2.6	1.5	3.0	3.6	2.0	5.4	0.6	1.7

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



## Energy Price of Malaysia in 2010

## Currency Exchange Rate

Currency Exchange Rate	Local currency / US Dollar	3.0835
Local Currency Unit		Ringgit

## IMPORT PRICES

## WHOLESALE PRICES

## CONSUMER PRICES

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	RM / kg	1.49	Coking Coal			Coking Coal		
Anthracite	RM / kg	1.30	Anthracite			Anthracite		
Other bituminous coal	RM / kg	0.30	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite	RM / kg	0.86	Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke			Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil	RM / kg	2.03	Crude Oil			Crude Oil		
Natural Gas Liquids	RM / kg	24.51	Natural Gas Liquids			Natural Gas Liquids		
Ethane	RM / kg	8.11	Ethane			Ethane		
LPG	RM / kg	3.00	LPG			LPG	RM/Litre	1.85
Naphtha	RM / kg	1.96	Naphtha			Naphtha		
Motor Gasoline	RM / kg	2.46	Motor Gasoline			Motor Gasoline	RM/Litre	1.90
Aviation Gasoline			Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel	RM / kg	7.38	Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Other Kerosene			Other Kerosene			Other Kerosene		
Gas/Diesel Oil	RM / kg	2.24	Gas/Diesel Oil			Gas/Diesel Oil	RM/Litre	1.75
Fuel Oil	RM / kg	1.62	Fuel Oil			Fuel Oil		
White Spirit SBP			White Spirit SBP			White Spirit SBP		
Lubricants	RM / kg	13.68	Lubricants			Lubricants		
Bitumen	RM / kg	1.47	Bitumen			Bitumen		
Paraffin Waxes	RM / kg	7.57	Paraffin Waxes			Paraffin Waxes		
Petroleum Coke	RM / kg	2.91	Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas	RM / kg	0.49	Natural Gas			Natural Gas		
Liquefied Natural Gas			Liquefied Natural Gas			Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas		
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity			Electricity			Industrial	sen/kWh	25.46
						Commercial	sen/kWh	32.84
						Residential	sen/kWh	27.26
						Others		
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		

## 3.11 Mexico

## Energy Balance Table of Mexico

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products				
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene
<b>2010</b>								
Indigenous Production	4,839	-	160,623	-	-	-	-	-
Import	3,718	248	399	29,993	16,595	1,276	193	6,015
Export	-3	-1	-80,005	-9,667	-	-2,816	-64	-69
International Marine Bunkers	-	-	-	-811	-	-	-	-711
International Aviation Bunkers	-	-	-	-2,727	-25	-	-2,703	-
Stock Changes	-115	-53	-131	-103	107	-	-13	-191
<b>Total Primary Energy Supply</b>	<b>8,439</b>	<b>194</b>	<b>80,886</b>	<b>16,684</b>	<b>16,677</b>	<b>-1,540</b>	<b>-2,587</b>	<b>5,044</b>
Transfers	-	-	-10,933	12,099	2,832	-	-216	28
<b>Total Transformation Sector</b>	<b>-8,324</b>	<b>1,115</b>	<b>-73,827</b>	<b>56,407</b>	<b>18,866</b>	<b>3,275</b>	<b>2,520</b>	<b>17,649</b>
Main Activity Producer	-6,810	-	-	-8,753	-	-	-	-311
Autoproducers	-	-132	-	-1,319	-	-	-	-133
Gas Processing	-	-	-	-817	-	-	-	-
Petroleum Refineries	-	-	-73,827	67,297	18,866	3,275	2,520	18,093
Coal Transformation	-1,513	1,247	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-84	-	-6,279	-378	-	-	-973
Discrepancy	-0	286	3,874	-5,053	-2,108	-1,277	282	-2,624
<b>Total Final Energy Consumption</b>	<b>115</b>	<b>1,511</b>	<b>-</b>	<b>73,858</b>	<b>35,890</b>	<b>458</b>	<b>-</b>	<b>19,095</b>
<b>Industry Sector</b>	<b>115</b>	<b>1,511</b>	<b>-</b>	<b>5,842</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,415</b>
Iron and Steel	-	1,482	-	212	-	-	-	33
Chemical & Petrochemical	-	-	-	305	-	-	-	109
Non-metallic Minerals	102	-	-	2,541	-	-	-	11
Other Industries	13	29	-	2,785	-	-	-	1,263
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51,732</b>	<b>35,890</b>	<b>-</b>	<b>-</b>	<b>14,915</b>
Domestic Air Transport	-	-	-	21	21	-	-	-
Road	-	-	-	50,419	35,869	-	-	13,695
Rail	-	-	-	582	-	-	-	582
Inland Waterways	-	-	-	709	-	-	-	638
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,875</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>2,766</b>
Residential	-	-	-	6,585	-	-	27	-
Commerce and Public Services	-	-	-	1,506	-	-	-	113
Agriculture	-	-	-	2,784	-	-	1	2,653
Non-specified Others	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,410</b>	<b>-</b>	<b>458</b>	<b>-</b>	<b>-</b>
<b>2009</b>								
Indigenous Production	5,063	-	157,147	-	-	-	-	-
Import	2,835	132	502	24,439	14,262	249	52	2,924
Export	-3	-	-70,207	-10,151	-16	-2,958	-206	-241
International Marine Bunkers	-	-	-	-775	-	-	-	-675
International Aviation Bunkers	-	-	-	-2,686	-25	-	-2,661	-
Stock Changes	-73	-207	453	329	66	-	17	207
<b>Total Primary Energy Supply</b>	<b>7,823</b>	<b>-75</b>	<b>87,896</b>	<b>11,158</b>	<b>14,288</b>	<b>-2,708</b>	<b>-2,797</b>	<b>2,215</b>
Transfers	-	-	-10,719	11,870	2,561	-	-62	20
<b>Total Transformation Sector</b>	<b>-7,711</b>	<b>903</b>	<b>-76,517</b>	<b>59,951</b>	<b>20,978</b>	<b>3,170</b>	<b>2,773</b>	<b>18,840</b>
Main Activity Producer	-6,341	-	-	-9,383	-	-	-	-390
Autoproducers	-	-103	-	-1,225	-	-	-	-181
Gas Processing	-	-	-	-860	-	-	-	-
Petroleum Refineries	-	-	-76,517	71,419	20,978	3,170	2,773	19,411
Coal Transformation	-1,370	1,007	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-
Loss & Own Use	-	-67	-	-6,733	-419	-	-	-1,015
Discrepancy	-0	214	-659	-3,743	-1,973	-248	86	-1,910
<b>Total Final Energy Consumption</b>	<b>112</b>	<b>975</b>	<b>-</b>	<b>72,502</b>	<b>35,434</b>	<b>213</b>	<b>-</b>	<b>18,130</b>
<b>Industry Sector</b>	<b>112</b>	<b>975</b>	<b>-</b>	<b>6,183</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,344</b>
Iron and Steel	-	947	-	288	-	-	-	26
Chemical & Petrochemical	-	-	-	387	-	-	-	138
Non-metallic Minerals	99	-	-	2,779	-	-	-	13
Other Industries	13	28	-	2,728	-	-	-	1,166
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50,365</b>	<b>35,434</b>	<b>-</b>	<b>-</b>	<b>14,008</b>
Domestic Air Transport	-	-	-	21	21	-	-	-
Road	-	-	-	49,148	35,413	-	-	12,883
Rail	-	-	-	550	-	-	-	550
Inland Waterways	-	-	-	645	-	-	-	575
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,700</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>2,778</b>
Residential	-	-	-	6,450	-	-	20	-
Commerce and Public Services	-	-	-	1,453	-	-	-	102
Agriculture	-	-	-	2,797	-	-	1	2,676
Non-specified Others	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,254</b>	<b>-</b>	<b>213</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	41,911	3,192	1,532	5,918	8,362	-	-	226,377
601	3,116	-	-	2,197	12,439	-	-	-	-	34	-	46,830
-6,677	-3	-	-	-37	-736	-	-	-	-	-116	-	-90,527
-99	-	-	-	-1	-	-	-	-	-	-	-	-811
-	-	-	-	-	-	-	-	-	-	-	-	-2,727
-36	49	-	-	-18	-329	-	-	-	-	-	-	-730
-6,212	3,161	-	-	2,141	53,285	3,192	1,532	5,918	8,362	-82	-	178,411
-	6,525	-	2,930	-	-	-	-	-	-	-	-	1,166
8,891	87	3,195	-	1,924	-24,674	-3,192	-1,532	-5,801	-1,133	23,303	-	-37,658
-8,442	-	-	-	-	-22,491	-3,160	-1,532	-5,706	-	20,858	-	-27,595
-265	-	-	-	-921	-2,819	-33	-	-95	-1,133	2,445	-	-3,086
-	-817	-	-	-	636	-	-	-	-	-	-	-181
17,599	904	3,195	-	2,845	-	-	-	-	-	-	-	-6,530
-	-	-	-	-	-	-	-	-	-	-	-	-267
-	-	-	-	-	-	-	-	-	-	-	-	-
-1,528	-116	-3,195	-	-90	-15,856	-	-	-	-	-5,386	-	-27,606
212	312	-	-	149	-8	-0	-	-	-	41	-	-860
1,364	9,968	-	2,930	4,124	12,746	-	-	117	7,229	17,876	-	113,453
1,293	1,009	-	-	2,125	9,016	-	-	5	1,024	9,901	-	27,415
133	-	-	-	47	1,936	-	-	-	-	622	-	4,252
140	16	-	-	40	2,076	-	-	-	-	788	-	3,168
521	2	-	-	2,006	1,032	-	-	-	-	573	-	4,247
499	991	-	-	32	3,972	-	-	5	1,024	7,918	-	15,747
71	856	-	-	-	12	-	-	-	-	102	-	51,846
-	-	-	-	-	-	-	-	-	-	-	-	21
-	856	-	-	-	12	-	-	-	-	-	-	50,431
-	-	-	-	-	-	-	-	-	-	102	-	684
71	-	-	-	-	-	-	-	-	-	-	-	709
-	-	-	-	-	-	-	-	-	-	-	-	-
-	8,081	-	-	-	966	-	-	112	6,205	7,873	-	26,030
-	6,558	-	-	-	737	-	-	67	6,205	4,249	-	17,843
-	1,393	-	-	-	229	-	-	45	-	1,794	-	3,574
-	130	-	-	-	-	-	-	-	-	740	-	3,523
-	-	-	-	-	-	-	-	-	-	1,090	-	1,090
-	23	-	2,930	2,000	2,752	-	-	-	-	-	-	8,162
-	-	-	-	-	38,407	2,297	2,737	6,010	8,383	-	-	220,044
2,140	3,165	-	-	1,646	10,777	-	-	-	-	30	-	38,714
-6,620	-38	-	-	-72	-588	-	-	-	-	-107	-	-81,055
-99	-	-	-	-1	-	-	-	-	-	-	-	-775
-	-	-	-	-	-	-	-	-	-	-	-	-2,686
50	-	-	-	-11	-65	-	-	-	-	-	-	437
-4,528	3,127	-	-	1,562	48,530	2,297	2,737	6,010	8,383	-78	-	174,680
-	6,392	-	2,959	-	-	-	-	-	-	-	-	1,150
7,975	132	3,241	-	2,841	-23,121	-2,297	-2,737	-5,849	-1,130	22,448	-	-36,061
-8,993	-	-	-	-	-20,891	-2,274	-2,737	-5,818	-	20,219	-	-27,225
-298	-	-	-	-747	-2,842	-23	-	-31	-1,130	2,228	-	-3,127
-	-860	-	-	-	613	-	-	-	-	-	-	-247
17,266	992	3,241	-	3,588	-	-	-	-	-	-	-	-5,099
-	-	-	-	-	-	-	-	-	-	-	-	-363
-	-	-	-	-	-	-	-	-	-	-	-	-
-1,790	-178	-3,241	-	-89	-13,145	-	-	-	-	-5,229	-	-25,174
70	226	-	-	5	-460	-	-	0	-0	153	-	-4,494
1,727	9,698	-	2,959	4,320	11,805	-	-	161	7,252	17,294	-	110,102
1,657	895	-	-	2,287	8,247	-	-	7	1,027	9,288	-	25,840
178	-	-	-	84	2,179	-	-	-	-	676	-	4,090
205	18	-	-	25	1,539	-	-	-	-	735	-	2,661
618	2	-	-	2,145	1,092	-	-	-	-	360	-	4,331
656	874	-	-	32	3,437	-	-	7	1,027	7,517	-	14,758
70	853	-	-	-	13	-	-	-	-	96	-	50,474
-	-	-	-	-	-	-	-	-	-	-	-	21
-	853	-	-	-	13	-	-	-	-	-	-	49,161
-	-	-	-	-	-	-	-	-	-	96	-	646
70	-	-	-	-	-	-	-	-	-	-	-	645
-	-	-	-	-	-	-	-	-	-	-	-	-
-	7,901	-	-	-	896	-	-	154	6,225	7,910	-	25,884
-	6,430	-	-	-	690	-	-	92	6,225	4,232	-	17,690
-	1,351	-	-	-	205	-	-	62	-	1,841	-	3,561
-	120	-	-	-	-	-	-	-	-	800	-	3,597
-	-	-	-	-	-	-	-	-	-	1,037	-	1,037
-	50	-	2,959	2,033	2,649	-	-	-	-	-	-	7,904

## Major Energy Indicators of Mexico

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	122,501	145,091	169,258	171,292	175,965	181,598	174,680	178,411
Indigenous Production	194,661	222,311	253,442	250,504	244,152	233,356	220,044	226,377
Import	5,648	25,254	30,668	34,557	37,127	41,565	38,714	46,830
Export	-75,521	-96,860	-110,939	-109,849	-100,536	-88,647	-81,055	-90,527
Final Energy Consumption	84,117	98,170	105,160	109,780	113,362	114,937	110,102	113,453
Industry	26,372	27,803	26,851	28,180	28,800	27,877	25,840	27,415
Transport	28,530	36,159	44,463	46,929	49,604	51,823	50,474	51,846
Residential	15,749	18,092	17,684	17,814	17,853	17,869	17,690	17,843
Commerce & Public Services	1,481	3,429	3,424	3,633	3,563	3,556	3,561	3,574
Others	11,985	12,687	12,738	13,224	13,542	13,812	12,537	12,775
<b>Coal, Coal Products</b>								
Primary Energy Supply	3,467	6,846	9,113	9,081	9,099	7,710	7,748	8,633
Indigenous Production	3,387	5,415	5,159	5,510	6,000	5,477	5,063	4,839
Import	235	1,699	3,787	3,900	2,851	2,511	2,967	3,966
Export	-6	-4	-4	-4	-6	-6	-3	-3
Transformation Sector	-1,836	-5,319	-7,347	-7,132	-7,088	-5,557	-6,808	-7,209
Power Generation	-1,725	-4,734	-7,067	-6,919	-6,899	-5,142	-6,445	-6,942
Final Energy Consumption	1,555	1,378	1,250	1,261	1,270	1,264	1,087	1,626
Industry	1,555	1,378	1,250	1,261	1,270	1,264	1,087	1,626
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	82,018	78,348	92,069	88,059	86,569	87,932	87,896	80,886
Indigenous Production	152,756	171,117	197,237	190,491	179,593	168,925	157,147	160,623
Import	-	352	382	465	557	471	502	399
Export	-70,432	-92,202	-105,474	-103,206	-93,348	-80,803	-70,207	-80,005
Transformation Sector	-69,255	-65,955	-79,762	-75,005	-74,799	-76,894	-76,517	-73,827
Petroleum Refineries	-69,255	-65,955	-79,762	-75,005	-74,799	-76,894	-76,517	-73,827
<b>Petroleum Products</b>								
Primary Energy Supply	-1,753	11,842	9,661	11,228	13,782	16,242	11,158	16,684
Import	4,994	20,703	18,807	21,450	24,346	26,993	24,439	29,993
Export	-4,915	-4,431	-5,139	-6,238	-5,829	-6,820	-10,151	-9,667
Transformation Sector	50,097	40,962	54,042	57,273	56,190	56,835	59,951	56,407
Power Generation	-15,119	-22,978	-16,062	-12,774	-12,423	-11,070	-10,608	-10,073
Petroleum Refineries	65,215	65,086	71,200	71,066	69,629	68,799	71,419	67,297
Final Energy Consumption	51,210	61,663	68,880	72,099	74,827	76,019	72,502	73,858
Industry	7,445	7,479	7,286	7,598	7,861	6,934	6,183	5,842
Transport	28,461	36,058	44,353	46,818	49,495	51,714	50,365	51,732
Residential	6,573	7,635	6,881	6,894	6,818	6,717	6,450	6,585
Commerce & Public Services	540	1,732	1,535	1,682	1,569	1,501	1,453	1,506
Others	8,191	8,758	8,824	9,107	9,084	9,153	8,051	8,193
<b>Natural Gas</b>								
Primary Energy Supply	23,127	28,929	38,077	43,021	46,366	49,005	48,530	53,285
Indigenous Production	22,757	26,727	30,604	34,533	38,309	38,150	38,407	41,911
Import	370	2,408	7,684	8,697	9,349	11,559	10,777	12,439
Export	-	-207	-211	-289	-1,227	-893	-588	-736
Transformation Sector	-3,432	-7,830	-16,294	-19,756	-21,655	-22,938	-23,121	-24,674
Power Generation	-3,432	-8,683	-17,092	-20,505	-22,394	-23,582	-23,734	-25,310
Final Energy Consumption	14,166	12,952	11,101	12,148	12,533	12,507	11,805	12,746
Industry	10,828	9,007	7,939	8,701	8,827	8,637	8,247	9,016
Transport	-	6	16	17	16	14	13	12
Residential	811	520	735	724	745	737	690	737
Commerce & Public Services	-	170	174	199	204	213	205	229
Others	2,527	3,250	2,237	2,506	2,741	2,905	2,649	2,752
<b>Electricity</b>								
Power Generation	9,962	17,559	20,969	21,457	22,123	22,520	22,448	23,303
Thermal	7,247	12,729	15,888	16,320	17,086	16,633	17,720	18,127
Hydro	2,019	2,849	2,379	2,614	2,346	3,369	2,297	3,192
Nuclear	255	714	939	944	905	852	912	511
Others	441	1,266	1,763	1,580	1,786	1,666	1,518	1,473
Final Energy Consumption	8,617	13,950	16,095	16,502	17,061	17,395	17,294	17,876
Industry	4,592	8,559	8,985	9,259	9,559	9,675	9,288	9,901
Transport	69	95	94	94	94	96	96	102
Residential	1,754	3,107	3,658	3,823	3,942	4,081	4,232	4,249
Commerce & Public Services	935	1,511	1,682	1,716	1,748	1,790	1,841	1,794
Others	1,267	679	1,677	1,610	1,718	1,754	1,837	1,830

## Major Economic Indicators of Mexico

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	84.31	99.96	106.48	107.84	109.22	110.63	112.03	113.42
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	413.33	581.43	637.06	669.87	691.71	699.94	656.26	692.48
Real Term (Billions of 2000 Price and 2000 PPP)	640.77	901.38	987.62	1,038.48	1,072.34	1,085.11	1,017.39	1,073.54
Nominal (Billions of Current USD)	262.71	581.43	848.95	952.28	1,035.93	1,094.48	882.35	1,035.87
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	4,903	5,817	5,983	6,212	6,333	6,327	5,858	6,105
Real Term (2000 Price and 2000 PPP)	7,601	9,017	9,275	9,630	9,818	9,809	9,081	9,465
Nominal (Current USD)	3,116	5,817	7,973	8,831	9,485	9,893	7,876	9,133
Nominal GDP & its Components (Billions of Current MXN) *1								
Gross Domestic Product	738.90	5,497.74	9,251.74	10,379.09	11,320.84	12,181.26	11,923.68	13,089.27
Household Final Consumption Expenditure, etc.	514.12	3,682.55	6,142.08	6,714.81	7,316.01	7,864.59	7,839.38	8,472.86
General Government Final Consumption Expenditure	61.95	612.62	996.66	1,077.34	1,179.01	1,307.01	1,426.92	1,524.41
Gross Fixed Capital Formation	132.11	1,174.30	1,849.84	2,168.96	2,392.88	2,696.45	2,543.34	2,634.83
Stock Change	38.88	137.90	345.04	550.99	498.79	585.20	248.24	633.22
Exports of Goods and Services	137.44	1,700.95	2,507.35	2,902.87	3,161.64	3,416.59	3,295.58	3,964.44
Imports of Goods and Services	145.60	1,810.58	2,641.66	3,032.34	3,340.55	3,688.58	3,465.61	4,153.97
Real GDP & its Components (Billions of 1993 MXN) *1								
Gross Domestic Product	5,264.47	7,405.55	8,114.09	8,531.97	8,810.14	8,915.03	8,358.68	8,820.01
Household Final Consumption Expenditure, etc.	3,074.12	4,783.16	5,580.85	5,891.77	6,126.88	6,238.75	5,792.14	6,080.28
General Government Final Consumption Expenditure	726.14	907.62	899.45	907.82	936.16	945.81	981.44	1,008.61
Gross Fixed Capital Formation	884.23	1,520.51	1,645.21	1,824.92	1,951.63	2,066.02	1,820.05	1,863.20
Stock Change	178.86	446.47	138.63	99.66	42.57	-6.45	-88.57	-14.27
Exports of Goods and Services	543.86	1,907.59	2,280.31	2,529.70	2,675.09	2,687.21	2,318.17	2,912.36
Imports of Goods and Services	572.45	2,016.13	2,434.00	2,739.97	2,933.98	3,016.31	2,454.14	3,030.14
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	4.4	3.6	3.6	3.6	3.5	3.5	3.7	3.6
Industry	31.3	33.0	30.9	31.1	30.7	30.3	29.9	30.1
Services, etc.	59.0	58.6	60.3	60.1	60.5	60.9	61.2	61.1
Industrial Production Index (2005=100) *2	67.2	99.7	100.0	105.7	107.9	107.7	99.5	105.6
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	40.711	166.367	214.207	249.961	271.821	291.265	229.712	298.305
Imports, c.i.f.	43.548	179.464	228.240	263.476	290.246	318.304	241.515	310.205
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-0.881	-8.538	-7.851	-6.457	-10.509	-17.786	-5.067	-3.080
Current Account	-7.451	-18.767	-5.876	-4.502	-9.303	-15.678	-5.130	-3.107
Overall Balance	2.218	7.126	6.964	-1.303	10.250	7.731	5.690	22.938
Foreign Exchange Rate (MXN/USD) *1	2.8126	9.4556	10.8979	10.8992	10.9282	11.1297	13.5135	12.6360
Purchasing Power Parity (MXN/International Dollar) *1	1.4368	6.0993	7.1269	7.1869	7.3755	7.4695	7.7089	7.9266
Price Indices								
GDP Deflator (2003=100) *3	14.0	74.2	114.0	121.6	128.5	136.6	142.7	148.4
Wholesale Price Index (2005=100) *2	15.4	75.0	100.0	106.1	110.6	118.8	125.8	129.9
Consumer Price Index (2005=100) *2	14.6	78.6	100.0	103.6	107.7	113.3	119.3	124.2
Growth Rate (%)								
Real GDP *3	5.07	6.60	3.21	5.15	3.26	1.19	-6.24	5.52
Population *3	1.98	1.47	1.24	1.27	1.28	1.29	1.27	1.24
Price *2								
Wholesale Price Index	21.7	7.8	3.6	6.1	4.3	7.4	5.9	3.3
Consumer Price Index	26.7	9.5	4.0	3.6	4.0	5.1	5.3	4.2

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"

: 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

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products				
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene
<b>2010</b>								
Indigenous Production	3,132	-	2,745	-	-	-	-	-
Import	133	-	5,233	1,771	985	-	50	580
Export	-1,708	-	-2,453	-122	-36	-	-	-
International Marine Bunkers	-	-	-	-335	-2	-	-	-40
International Aviation Bunkers	-	-	-	-778	-	-	-778	-
Stock Changes	-249	-	-43	20	-60	-	10	63
<b>Total Primary Energy Supply</b>	<b>1,307</b>	<b>-</b>	<b>5,482</b>	<b>555</b>	<b>887</b>	<b>-</b>	<b>-719</b>	<b>603</b>
Transfers	-	-	-163	167	-	-	-19	-16
<b>Total Transformation Sector</b>	<b>-734</b>	<b>97</b>	<b>-5,360</b>	<b>5,372</b>	<b>1,467</b>	<b>-</b>	<b>1,050</b>	<b>2</b>
Main Activity Producer	-310	-	-	-	-	-	-	-
Autoproducers	-8	-180	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-5,364	5,372	1,467	-	1,050	2
Coal Transformation	-416	278	-	-	-	-	-	-
Other Transformation	-	-	4	-	-	-	-	-
Loss & Own Use	-4	-57	-	-353	-	-	-	-
Discrepancy	-10	-0	41	146	158	-	26	-58
<b>Total Final Energy Consumption</b>	<b>558</b>	<b>41</b>	<b>-</b>	<b>5,887</b>	<b>2,512</b>	<b>-</b>	<b>338</b>	<b>4</b>
<b>Industry Sector</b>	<b>469</b>	<b>41</b>	<b>-</b>	<b>347</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>260</b>
Iron and Steel	-	41	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	75	-	-	-	-	-	-	-
Other Industries	394	-	-	347	2	-	-	4
<b>Transport Sector</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>4,600</b>	<b>2,477</b>	<b>-</b>	<b>338</b>	<b>1,753</b>
Domestic Air Transport	-	-	-	350	12	-	338	-
Road	-	-	-	4,124	2,465	-	-	1,644
Rail	-	-	-	46	-	-	-	46
Inland Waterways	-	-	-	80	-	-	-	63
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	1	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>88</b>	<b>-</b>	<b>-</b>	<b>579</b>	<b>33</b>	<b>-</b>	<b>-</b>	<b>461</b>
Residential	12	-	-	69	-	-	-	7
Commerce and Public Services	33	-	-	128	1	-	-	103
Agriculture	43	-	-	287	31	-	-	256
Non-specified Others	-	-	-	96	1	-	-	95
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>360</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>								
Indigenous Production	2,643	-	2,771	-	-	-	-	-
Import	353	-	4,895	2,224	1,082	-	190	722
Export	-1,478	-	-2,370	-210	-5	-	-	-
International Marine Bunkers	-	-	-	-341	-	-	-	-38
International Aviation Bunkers	-	-	-	-737	-	-	-737	-
Stock Changes	-56	-	-55	31	-5	-	1	32
<b>Total Primary Energy Supply</b>	<b>1,463</b>	<b>-</b>	<b>5,240</b>	<b>968</b>	<b>1,072</b>	<b>-</b>	<b>-545</b>	<b>2</b>
Transfers	-	-	-77	79	-1	-	-17	-
<b>Total Transformation Sector</b>	<b>-1,004</b>	<b>85</b>	<b>-5,218</b>	<b>5,253</b>	<b>1,511</b>	<b>-</b>	<b>922</b>	<b>1</b>
Main Activity Producer	-623	-	-	-2	-	-	-	-2
Autoproducers	-8	-157	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-5,220	5,255	1,511	-	922	1
Coal Transformation	-373	242	-	-	-	-	-	-
Other Transformation	-	-	2	-	-	-	-	-
Loss & Own Use	-4	-50	-	-354	-	-	-	-
Discrepancy	47	0	55	-130	-79	-	-46	4
<b>Total Final Energy Consumption</b>	<b>501</b>	<b>35</b>	<b>-</b>	<b>5,817</b>	<b>2,502</b>	<b>-</b>	<b>314</b>	<b>2</b>
<b>Industry Sector</b>	<b>434</b>	<b>35</b>	<b>-</b>	<b>392</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>310</b>
Iron and Steel	-	35	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-
Non-metallic Minerals	63	-	-	-	-	-	-	-
Other Industries	371	-	-	392	5	-	-	2
<b>Transport Sector</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>4,565</b>	<b>2,453</b>	<b>-</b>	<b>314</b>	<b>1,733</b>
Domestic Air Transport	-	-	-	325	12	-	314	-
Road	-	-	-	4,095	2,442	-	-	1,619
Rail	-	-	-	52	-	-	-	52
Inland Waterways	-	-	-	94	-	-	-	62
Pipeline Transport	-	-	-	-	-	-	-	-
Non-specified Transport	0	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>67</b>	<b>-</b>	<b>-</b>	<b>566</b>	<b>44</b>	<b>-</b>	<b>-</b>	<b>429</b>
Residential	19	-	-	63	-	-	-	7
Commerce and Public Services	29	-	-	97	4	-	-	55
Agriculture	19	-	-	305	39	-	-	266
Non-specified Others	-	-	-	102	-	-	-	102
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>293</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,855	2,125	-	5,389	1,177	-	-	18,423
-	9	-	-	146	-	-	-	-	1	-	-	7,137
-70	-16	-	-	-	-	-	-	-	-	-	-	-4,284
-293	-	-	-	-	-	-	-	-	-	-	-	-335
-	-	-	-	-	-	-	-	-	-	-	-	-778
7	-3	-	-	3	-127	-	-	-	-	-	-	-399
-356	-10	-	-	149	3,728	2,125	-	5,389	1,177	-	-	19,765
-	170	-	-	33	-	-	-	-	-	-	-	4
387	-	309	-	212	-1,746	-2,125	-	-5,154	-161	3,854	31	-5,926
-	-	-	-	-	-1,710	-2,124	-	-5,154	-37	3,734	-	-5,601
-	-	-	-	-	-36	-1	-	-	-121	120	31	-195
-	-	-	-	-	-	-	-	-	-	-	-	-
387	-	309	-	212	-	-	-	-	-	-	-	8
-	-	-	-	-	-	-	-	-	-	-	-	-139
-	-	-	-	-	-	-	-	-	-3	-	-	0
-	-	-309	-	-44	-216	-	-	-	-	-427	-	-1,057
7	1	-	-	10	-109	-0	-	-0	-0	-47	-31	-11
38	161	-	-	360	1,658	-	-	235	1,016	3,380	-	12,775
20	60	-	-	-	801	-	-	146	869	1,221	-	3,895
-	-	-	-	-	61	-	-	-	-	127	-	228
-	-	-	-	-	365	-	-	-	-	32	-	397
-	-	-	-	-	18	-	-	-	-	19	-	112
20	60	-	-	-	357	-	-	146	869	1,044	-	3,158
17	15	-	-	-	1	-	-	-	-	9	-	4,610
-	-	-	-	-	-	-	-	-	-	-	-	350
-	15	-	-	-	1	-	-	-	-	-	-	4,125
-	-	-	-	-	-	-	-	-	-	-	-	46
17	-	-	-	-	-	-	-	-	-	-	-	80
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	9	-	10
-	85	-	-	-	308	-	-	89	147	2,150	-	3,361
-	62	-	-	-	128	-	-	16	141	1,148	-	1,513
-	24	-	-	-	148	-	-	56	6	776	-	1,147
-	-	-	-	-	32	-	-	17	-	147	-	526
-	-	-	-	-	-	-	-	-	-	79	-	175
-	-	-	-	360	548	-	-	-	-	-	-	908
-	-	-	-	-	3,595	2,083	-	4,507	1,065	-	-	16,664
-	107	-	-	122	-	-	-	-	-	-	-	7,472
-205	-	-	-	-	-	-	-	-	-	-	-	-4,058
-303	-	-	-	-	-	-	-	-	-	-	-	-341
-	-	-	-	-	-	-	-	-	-	-	-	-737
-10	2	-	-	9	-88	-	-	-	-	-	-	-168
-518	109	-	-	132	3,507	2,083	-	4,507	1,065	-	-	18,833
-	81	-	-	16	-	-	-	-	-	-	-	2
568	-	312	-	188	-1,531	-2,083	-	-4,264	-154	3,737	33	-5,146
-	-	-	-	-	-1,495	-2,082	-	-4,264	-34	3,624	-	-4,877
-	-	-	-	-	-36	-1	-	-	-117	113	33	-174
-	-	-	-	-	-	-	-	-	-	-	-	-
568	-	312	-	188	-	-	-	-	-	-	-	35
-	-	-	-	-	-	-	-	-	-	-	-	-131
-	-	-	-	-	-	-	-	-	-2	-	-	0
-	-	-312	-	-41	-202	-	-	-	-	-419	-	-1,028
-7	-0	-	-	-1	-107	-0	-	-	0	-47	-33	-215
43	190	-	-	293	1,666	-	-	243	911	3,271	-	12,446
11	63	-	-	-	783	-	-	151	762	1,132	-	3,688
-	-	-	-	-	57	-	-	-	-	119	-	211
-	-	-	-	-	340	-	-	-	-	33	-	373
-	-	-	-	-	36	-	-	-	-	20	-	119
11	63	-	-	-	350	-	-	151	762	960	-	2,985
32	34	-	-	-	1	-	-	-	-	9	-	4,575
-	-	-	-	-	-	-	-	-	-	-	-	325
-	34	-	-	-	1	-	-	-	-	-	-	4,095
-	-	-	-	-	-	-	-	-	-	-	-	52
32	-	-	-	-	-	-	-	-	-	-	-	94
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	9	-	9
-	93	-	-	-	335	-	-	92	149	2,131	-	3,341
-	56	-	-	-	137	-	-	15	143	1,136	-	1,513
-	38	-	-	-	157	-	-	60	6	779	-	1,128
-	-	-	-	-	42	-	-	17	-	146	-	529
-	-	-	-	-	-	-	-	-	-	70	-	172
-	-	-	-	293	547	-	-	-	-	-	-	841

## Major Energy Indicators of New Zealand

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	14,035	17,740	17,708	17,933	18,167	18,619	18,833	19,765
Indigenous Production	12,688	14,969	13,716	14,219	15,154	16,174	16,664	18,423
Import	3,812	5,942	7,404	7,510	7,567	7,567	7,472	7,137
Export	-1,696	-2,590	-2,486	-2,710	-3,232	-4,644	-4,058	-4,284
Final Energy Consumption	9,713	12,935	12,535	12,661	12,700	12,659	12,446	12,775
Industry	3,597	4,260	4,079	3,986	4,052	3,933	3,688	3,895
Transport	2,961	4,066	4,543	4,596	4,639	4,667	4,575	4,610
Residential	1,209	1,355	1,433	1,480	1,441	1,439	1,513	1,513
Commerce & Public Services	797	930	1,127	1,137	1,159	1,157	1,128	1,147
Others	1,150	2,324	1,353	1,462	1,408	1,464	1,541	1,609
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,185	1,106	2,194	1,952	1,674	1,955	1,463	1,307
Indigenous Production	1,423	2,073	3,164	3,404	2,832	2,836	2,643	3,132
Import	1	11	562	638	383	314	353	133
Export	-239	-1,116	-1,667	-1,934	-1,445	-1,781	-1,478	-1,708
Transformation Sector	-418	-487	-1,533	-1,464	-896	-1,262	-919	-637
Power Generation	-170	-384	-1,406	-1,348	-771	-1,148	-788	-498
Final Energy Consumption	675	516	575	606	664	692	537	599
Industry	542	434	483	504	569	590	469	510
Transport	2	2	2	2	2	1	0	1
Residential	87	25	20	16	12	8	19	12
Commerce & Public Services	35	43	43	40	48	53	29	33
Others	9	13	27	45	33	40	19	43
<b>Crude Oil</b>								
Primary Energy Supply	5,100	5,430	5,214	5,263	5,018	5,302	5,240	5,482
Indigenous Production	2,692	1,944	1,084	1,061	2,086	2,933	2,771	2,745
Import	3,293	4,724	4,829	4,780	4,698	4,967	4,895	5,233
Export	-965	-1,263	-636	-680	-1,664	-2,653	-2,370	-2,453
Transformation Sector	-4,879	-5,204	-5,171	-5,225	-4,936	-5,319	-5,218	-5,360
Petroleum Refineries	-4,879	-5,204	-5,171	-5,225	-4,936	-5,322	-5,220	-5,364
<b>Petroleum Products</b>								
Primary Energy Supply	-823	249	830	964	1,241	956	968	555
Import	519	1,208	2,013	2,093	2,486	2,284	2,224	1,771
Export	-492	-211	-183	-95	-123	-210	-210	-122
Transformation Sector	4,969	5,266	5,425	5,291	5,066	5,351	5,253	5,372
Power Generation	-6	-	-1	-5	-	-32	-2	-
Petroleum Refineries	4,975	5,266	5,426	5,296	5,079	5,382	5,255	5,372
Final Energy Consumption	4,026	5,306	5,963	6,017	6,057	6,084	5,817	5,887
Industry	285	337	426	436	461	475	392	347
Transport	2,894	4,056	4,532	4,586	4,628	4,657	4,565	4,600
Residential	12	49	67	72	76	64	63	69
Commerce & Public Services	168	119	150	115	122	113	97	128
Others	667	745	788	808	770	775	700	743
<b>Natural Gas</b>								
Primary Energy Supply	3,873	5,059	3,230	3,311	3,644	3,440	3,507	3,728
Indigenous Production	3,872	5,056	3,228	3,311	3,645	3,440	3,595	3,855
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-1,990	-1,898	-1,725	-1,750	-2,106	-1,810	-1,531	-1,746
Power Generation	-1,240	-1,898	-1,725	-1,750	-2,106	-1,810	-1,531	-1,746
Final Energy Consumption	1,797	3,011	1,335	1,313	1,312	1,352	1,666	1,658
Industry	1,228	1,338	703	646	677	672	783	801
Transport	57	-	-	-	1	1	1	1
Residential	75	156	142	143	122	118	137	128
Commerce & Public Services	95	136	167	159	141	134	157	148
Others	343	1,381	324	365	371	427	589	580
<b>Electricity</b>								
Power Generation	2,775	3,375	3,695	3,750	3,763	3,770	3,737	3,854
Thermal	469	864	1,245	1,246	1,207	1,260	451	-369
Hydro	1,994	2,101	2,006	2,027	2,033	1,921	2,083	2,125
Nuclear	-	-	-	-	-	-	-	-
Others	312	410	444	476	522	589	1,203	2,098
Final Energy Consumption	2,425	2,945	3,270	3,350	3,344	3,290	3,271	3,380
Industry	963	1,206	1,316	1,266	1,263	1,198	1,132	1,221
Transport	9	9	9	9	9	9	9	9
Residential	877	968	1,044	1,089	1,071	1,090	1,136	1,148
Commerce & Public Services	454	586	700	755	780	789	779	776
Others	123	176	200	231	221	204	216	226

## Major Economic Indicators of New Zealand

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	3.33	3.86	4.13	4.18	4.23	4.27	4.32	4.37
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	40.06	53.38	64.89	65.39	67.34	66.30	65.99	67.24
Real Term (Billions of 2000 Price and 2000 PPP)	61.05	81.37	98.90	99.66	102.63	101.05	100.57	102.48
Nominal (Billions of Current USD)	44.43	53.38	113.06	109.38	133.95	130.43	117.36	142.74
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	12,029	13,839	15,696	15,626	15,925	15,531	15,289	15,394
Real Term (2000 Price and 2000 PPP)	18,335	21,092	23,924	23,816	24,272	23,671	23,303	23,462
Nominal (Current USD)	13,342	13,839	27,349	26,138	31,679	30,553	27,194	32,679
Nominal GDP & its Components (Billions of Current NZD) *1								
Gross Domestic Product	74.47	117.51	160.57	168.66	182.26	185.56	187.80	198.04
Household Final Consumption Expenditure, etc.	45.50	70.18	95.50	100.62	105.77	108.60	110.83	114.70
General Government Final Consumption Expenditure	14.06	20.32	28.97	31.37	34.20	37.27	38.21	40.29
Gross Fixed Capital Formation	14.92	23.63	38.56	38.98	41.90	40.31	36.85	37.53
Stock Change	-0.15	1.42	1.10	0.07	1.58	1.20	-1.32	N.A.
Exports of Goods and Services	19.76	41.16	43.93	48.27	51.61	57.20	52.42	55.78
Imports of Goods and Services	19.57	39.20	47.49	50.65	53.15	59.60	49.69	52.82
Real GDP & its Components (Billions of 2000 NZD) *1								
Gross Domestic Product	99.12	132.11	160.57	161.81	166.63	164.06	163.29	166.39
Household Final Consumption Expenditure, etc.	58.60	76.54	95.50	97.82	101.00	99.78	100.18	102.37
General Government Final Consumption Expenditure	19.62	23.81	28.97	30.16	31.65	32.99	33.06	34.19
Gross Fixed Capital Formation	17.80	26.22	38.56	37.67	39.45	37.41	32.93	33.66
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	21.74	37.37	43.93	45.22	46.67	45.05	47.12	48.50
Imports of Goods and Services	19.27	32.23	47.49	46.75	51.45	49.18	44.54	49.11
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	5.7	5.3	5.0	5.0	4.8	5.0	5.0	N.A.
Industry	25.8	23.6	23.3	22.3	22.2	21.4	20.4	N.A.
Services, etc.	68.5	71.1	71.7	72.7	72.9	73.7	74.6	N.A.
Manufacturing Production Index (2005=100) *2	58.8	87.7	100.0	96.0	97.4	96.5	88.8	89.6
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	9.394	13.272	21.730	22.409	26.943	30.580	24.933	31.396
Imports, c.i.f.	9.501	13.906	26.219	26.424	30.882	34.369	25.566	30.617
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.815	0.609	-2.577	-1.997	-1.825	-1.730	1.307	2.344
Current Account	-1.453	-2.407	-8.777	-8.933	-10.825	-11.567	-3.248	-4.994
Overall Balance	1.014	-0.106	2.417	4.255	3.088	-4.997	3.348	0.848
Foreign Exchange Rate (NZD/USD) *1	1.6762	2.2011	1.4203	1.5421	1.3607	1.4227	1.6002	1.3874
Purchasing Power Parity (NZD/International Dollar) *1	1.5206	1.4442	1.5350	1.4869	1.5027	1.4907	1.4753	1.5147
Price Indices								
GDP Deflator (2005=100) *3	75.1	88.9	100.0	104.2	109.4	113.1	115.0	119.0
Industry Input Price Index (2005=100) *2	73.6	89.3	100.0	105.2	108.9	119.8	116.9	121.4
Consumer Price Index (2005=100) *2	73.8	88.4	100.0	103.2	105.8	109.9	112.0	115.3
Growth Rate (%) *3								
Real GDP	0.04	2.62	3.30	0.77	2.98	-1.54	-0.47	1.90
Population	0.93	0.59	1.14	1.23	1.04	0.96	1.10	1.21
Price								
Industry Input Price Index	4.6	8.3	5.4	5.2	3.6	10.0	-2.4	3.9
Consumer Price Index	6.1	3.0	3.2	3.2	2.6	3.9	1.9	2.9

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"

: 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

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	-	-	890	-	-	-	-	-	-
Import	-	-	972	824	73	-	10	34	496
Export	-	-	-886	-	-	-	-	-	-
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	-	-	-25	40	2	14	2	-	13
<b>Total Primary Energy Supply</b>	-	-	<b>952</b>	<b>863</b>	<b>75</b>	<b>14</b>	<b>12</b>	<b>34</b>	<b>509</b>
Transfers	-	-	-	1	18	-9	-8	5	3
<b>Total Transformation Sector</b>	-	-	<b>-948</b>	<b>314</b>	-	<b>270</b>	<b>92</b>	-	<b>114</b>
Main Activity Producer	-	-	-	-125	-	-	-	-	-62
Autoproducers	-	-	-	-462	-	-	-	-	-210
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-948	901	-	270	92	-	386
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-	-	-0	-28	0	-27	0	-0	-0
<b>Total Final Energy Consumption</b>	-	-	<b>4</b>	<b>1,151</b>	<b>93</b>	<b>247</b>	<b>96</b>	<b>39</b>	<b>625</b>
<b>Industry Sector</b>	-	-	<b>4</b>	<b>678</b>	-	<b>247</b>	-	-	<b>400</b>
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	-	-	4	678	-	247	-	-	400
<b>Transport Sector</b>	-	-	-	<b>421</b>	<b>93</b>	-	<b>96</b>	-	<b>226</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	421	93	-	96	-	226
<b>Other Sector</b>	-	-	-	<b>52</b>	-	-	-	<b>39</b>	-
Residential	-	-	-	-	-	-	-	-	-
Commerce and Public Services	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	52	-	-	-	39	-
<b>Non-energy</b>	-	-	-	-	-	-	-	-	-
<b>2009</b>									
Indigenous Production	-	-	2,018	-	-	-	-	-	-
Import	-	-	753	690	26	-	-	38	366
Export	-	-	-1,943	-	-	-	-	-	-
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	-	-	69	-47	-4	-16	2	-	-11
<b>Total Primary Energy Supply</b>	-	-	<b>897</b>	<b>643</b>	<b>21</b>	<b>-16</b>	<b>2</b>	<b>38</b>	<b>355</b>
Transfers	-	-	-	-1	70	-168	-	-	97
<b>Total Transformation Sector</b>	-	-	<b>-825</b>	<b>268</b>	-	<b>184</b>	<b>84</b>	-	<b>166</b>
Main Activity Producer	-	-	-	-94	-	-	-	-	-46
Autoproducers	-	-	-	-479	-	-	-	-	-206
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-825	841	-	184	84	-	418
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-25	-	-	-	-	-
Discrepancy	-	-	-68	-0	0	-	-0	-	-
<b>Total Final Energy Consumption</b>	-	-	<b>4</b>	<b>885</b>	<b>92</b>	-	<b>86</b>	<b>38</b>	<b>617</b>
<b>Industry Sector</b>	-	-	<b>4</b>	<b>426</b>	-	-	-	-	<b>396</b>
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	-	-	4	426	-	-	-	-	396
<b>Transport Sector</b>	-	-	-	<b>404</b>	<b>92</b>	-	<b>86</b>	-	<b>221</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	404	92	-	86	-	221
<b>Other Sector</b>	-	-	-	<b>54</b>	-	-	-	<b>38</b>	-
Residential	-	-	-	-	-	-	-	-	-
Commerce and Public Services	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	54	-	-	-	38	-
<b>Non-energy</b>	-	-	-	-	-	-	-	-	-





## Major Energy Indicators of Papua New Guinea

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	866	1,123	1,799	1,908	2,148	2,191	2,270	2,333
Indigenous Production	4,612	3,866	2,894	3,396	2,636	2,833	2,749	1,407
Import	797	908	1,673	1,724	1,596	1,513	1,443	1,796
Export	-4,512	-3,651	-2,767	-2,917	-1,659	-2,044	-1,943	-886
Final Energy Consumption	613	880	1,115	1,129	1,141	1,144	1,162	1,431
Industry	190	480	617	623	643	628	629	883
Transport	209	306	369	375	383	398	404	421
Residential	35	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	179	94	129	131	114	117	128	128
<b>Coal, Coal Products</b>								
Primary Energy Supply	1	-	-	-	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	1	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-	-	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	1	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	1	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	-	-	1,036	1,084	824	844	897	952
Indigenous Production	4,500	3,651	2,462	2,867	1,987	2,102	2,018	890
Import	-	-	917	993	778	870	753	972
Export	-4,500	-3,651	-2,344	-2,482	-1,487	-2,044	-1,943	-886
Transformation Sector	-	-	-993	-1,060	-800	-799	-825	-948
Petroleum Refineries	-	-	-993	-1,060	-800	-799	-825	-948
<b>Petroleum Products</b>								
Primary Energy Supply	753	908	331	295	675	616	643	863
Import	796	908	756	730	818	642	690	824
Export	-12	-	-423	-435	-172	-	-	-
Transformation Sector	-	-	527	562	187	259	268	314
Power Generation	-345	-222	-474	-498	-573	-552	-573	-587
Petroleum Refineries	-	-	1,000	1,060	760	811	841	901
Final Energy Consumption	398	686	836	850	858	868	885	1,151
Industry	87	338	419	425	433	425	426	678
Transport	209	306	369	375	383	398	404	421
Residential	24	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	78	42	48	50	42	44	54	52
<b>Natural Gas</b>								
Primary Energy Supply	72	119	241	259	326	338	338	123
Indigenous Production	72	119	241	259	326	338	338	123
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-120	-111	-108	-118	-118	-118
Power Generation	-	-119	-120	-111	-108	-118	-118	-118
Final Energy Consumption	72	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	72	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	154	204	284	285	289	290	296	301
Thermal	114	108	196	191	190	184	191	194
Hydro	40	80	77	74	74	74	73	71
Nuclear	-	-	-	-	-	-	-	-
Others	-	16	11	20	25	32	32	35
Final Energy Consumption	142	194	266	267	270	272	273	277
Industry	103	142	198	198	198	199	199	201
Transport	-	-	-	-	-	-	-	-
Residential	11	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	28	52	68	69	72	73	74	75

## Major Economic Indicators of Papua New Guinea

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	4.16	5.38	6.10	6.24	6.40	6.55	6.70	6.86
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	2.34	3.50	3.79	3.89	4.17	4.45	4.70	5.07
Real Term (Billions of 2000 Price and 2000 PPP)	6.23	9.31	10.09	10.35	11.10	11.84	12.49	13.49
Nominal (Billions of Current USD)	3.22	3.50	4.90	5.60	6.34	8.01	7.93	9.48
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	563	651	622	623	652	680	701	740
Real Term (2000 Price and 2000 PPP)	1,498	1,730	1,655	1,658	1,735	1,808	1,863	1,967
Nominal (Current USD)	775	651	804	897	991	1,223	1,183	1,382
Nominal GDP & its Components (Billions of Current PGK) *1								
Gross Domestic Product	3.08	9.74	15.19	17.13	18.80	21.63	21.84	25.78
Household Final Consumption Expenditure, etc.	1.82	4.34	8.72	8.88	10.50	12.95	15.52	16.03
General Government Final Consumption Expenditure	0.76	1.61	2.01	2.07	2.13	2.23	2.33	2.44
Gross Fixed Capital Formation	0.77	1.99	2.75	3.10	3.38	4.02	4.04	4.29
Stock Change	-0.02	0.14	0.26	0.29	0.30	0.30	0.30	0.30
Exports of Goods and Services	1.25	6.44	11.19	14.06	15.22	16.13	12.62	14.40
Imports of Goods and Services	1.51	4.79	9.74	11.27	12.81	13.37	12.44	13.68
Real GDP & its Components (Billions of 1983 PGK) *1								
Gross Domestic Product	5.19	7.75	8.40	8.62	9.24	9.86	10.40	11.23
Household Final Consumption Expenditure, etc.	3.06	3.30	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
General Government Final Consumption Expenditure	1.10	1.45	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Gross Fixed Capital Formation	1.33	1.78	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Stock Change	-0.04	0.13	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	2.54	5.23	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Imports of Goods and Services	2.90	4.14	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	39.1	39.4	37.3	36.7	35.5	34.9	34.2	32.7
Industry	22.5	31.4	32.5	32.6	32.8	33.0	32.9	31.8
Services, etc.	40.1	23.8	24.6	25.2	25.8	26.3	25.6	24.4
Industrial Production Index (2005=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.	1.177	2.096	3.273	4.166	4.681	5.713	4.394	5.733
Imports, c.i.f.	1.193	1.151	1.729	2.260	2.945	3.510	3.210	3.950
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.069	1.095	1.792	2.214	2.119	2.665	1.521	2.216
Current Account	-0.076	0.345	0.539	0.333	0.056	0.708	-0.852	-0.914
Overall Balance	0.022	0.104	-0.030	0.538	0.409	-0.406	0.169	0.085
Foreign Exchange Rate (PGK/USD) *1	0.9550	2.7822	3.1019	3.0567	2.9653	2.7001	2.7551	2.7193
Purchasing Power Parity (PGK/International Dollar) *1	0.6066	1.0460	1.3359	1.4224	1.4148	1.4926	1.4139	1.5272
Price Indices								
GDP Deflator (1998=100) *3	59.3	125.6	180.8	198.8	203.4	219.4	210.0	229.5
Wholesale Price Index (2005=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index (2005=100) *2	27.7	68.6	100.0	102.4	103.3	114.4	122.3	129.7
Growth Rate (%) *3								
Real GDP	-3.01	-2.49	3.60	2.58	7.20	6.70	5.50	8.00
Population	2.48	2.64	2.48	2.45	2.42	2.39	2.35	2.31
Price								
Wholesale Price Index	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index	7.0	15.6	1.8	2.4	0.9	10.8	6.9	6.0

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"

: PGK means Kina, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.14 Peru

## Energy Balance Table of Peru

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	60	-	7,115	-	-	-	-	-	-
Import	589	42	4,881	1,876	224	-	14	-	1,450
Export	-70	-	-968	-7,104	-1,779	-	-474	-	-138
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	109	4	120	2,695	-600	-	469	-	270
<b>Total Primary Energy Supply</b>	<b>688</b>	<b>46</b>	<b>11,147</b>	<b>-2,533</b>	<b>-2,155</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>1,581</b>
Transfers	-	-	-709	3,446	1,470	-	-58	58	551
<b>Total Transformation Sector</b>	<b>-257</b>	<b>-</b>	<b>-10,388</b>	<b>9,499</b>	<b>1,871</b>	<b>-</b>	<b>714</b>	<b>-</b>	<b>4,275</b>
Main Activity Producer	-257	-	-	-445	-	-	-	-	-83
Autoproducers	-	-	-	-188	-	-	-	-	-94
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-10,435	10,131	1,871	-	714	-	4,452
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	48	-	-	-	-	-	-
Loss & Own Use	-	-	-	-562	-26	-	-	-	-211
Discrepancy	122	-	-51	-1,783	204	-	-12	-0	-2,061
<b>Total Final Energy Consumption</b>	<b>553</b>	<b>46</b>	<b>-</b>	<b>8,067</b>	<b>1,365</b>	<b>-</b>	<b>653</b>	<b>58</b>	<b>4,136</b>
<b>Industry Sector</b>	<b>553</b>	<b>46</b>	<b>-</b>	<b>940</b>	<b>18</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>416</b>
Iron and Steel	54	46	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	499	-	-	940	18	-	-	7	416
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,681</b>	<b>1,163</b>	<b>-</b>	<b>653</b>	<b>-</b>	<b>3,602</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	5,681	1,163	-	653	-	3,602
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,119</b>	<b>184</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>118</b>
Residential	-	-	-	652	-	-	-	7	-
Commerce and Public Services	-	-	-	323	165	-	-	42	49
Agriculture	-	-	-	33	18	-	-	0	15
Non-specified Others	-	-	-	112	1	-	-	2	54
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>326</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	225	-	6,733	-	-	-	-	-	-
Import	531	22	5,024	1,176	150	-	47	-	858
Export	-	-	-1,011	-3,362	-1,569	-	-431	-	-75
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	42	8	45	-1,251	-451	-	375	-	-917
<b>Total Primary Energy Supply</b>	<b>799</b>	<b>30</b>	<b>10,792</b>	<b>-3,437</b>	<b>-1,870</b>	<b>-</b>	<b>-9</b>	<b>-</b>	<b>-134</b>
Transfers	-	-	-1,269	3,062	1,320	-	-74	74	475
<b>Total Transformation Sector</b>	<b>-258</b>	<b>-</b>	<b>-9,571</b>	<b>8,826</b>	<b>1,804</b>	<b>-</b>	<b>670</b>	<b>-0</b>	<b>3,827</b>
Main Activity Producer	-258	-	-	-344	-	-	-	-	-76
Autoproducers	-	-	-	-169	-	-	-	-0	-104
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-9,571	9,338	1,804	-	670	-	4,007
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-354	-13	-	-	-	-106
Discrepancy	9	0	48	59	-0	-	-0	-	41
<b>Total Final Energy Consumption</b>	<b>550</b>	<b>30</b>	<b>-</b>	<b>8,157</b>	<b>1,241</b>	<b>-</b>	<b>586</b>	<b>74</b>	<b>4,103</b>
<b>Industry Sector</b>	<b>550</b>	<b>30</b>	<b>-</b>	<b>1,470</b>	<b>16</b>	<b>-</b>	<b>-</b>	<b>19</b>	<b>672</b>
Iron and Steel	67	30	-	425	2	-	-	14	353
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	482	-	-	-	-	-	-	-	-
Other Industries	-	-	-	1,045	15	-	-	5	319
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,245</b>	<b>1,058</b>	<b>-</b>	<b>586</b>	<b>-</b>	<b>3,345</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	5,245	1,058	-	586	-	3,345
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,158</b>	<b>167</b>	<b>-</b>	<b>-</b>	<b>56</b>	<b>85</b>
Residential	-	-	-	623	-	-	-	12	-
Commerce and Public Services	-	-	-	286	150	-	-	41	31
Agriculture	-	-	-	30	16	-	-	0	11
Non-specified Others	-	-	-	219	0	-	-	2	42
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>284</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	7,626	1,724	-	6	414	-	-	16,945
39	-	-	-	149	-	-	-	-	84	-	-	7,471
-1,265	-423	-	-	-3,024	-2,130	-	-	-	-14	-10	-	-10,295
-	-	-	-	-	-	-	-	-	-	-	-	-
-350	57	-	-	2,850	-	-	-	-	-18	-	-	2,909
-1,576	-366	-	-	-26	5,496	1,724	-	6	465	-10	-	17,030
-	1,395	-	-	29	-	-	-	-	-	-	-	2,737
1,882	230	200	-	326	-3,129	-1,724	-	-6	-410	3,088	-	-3,327
-362	-	-	-	-	-2,969	-1,683	-	-	-32	2,885	-	-2,500
-89	-	-5	-	-	-160	-42	-	-6	-200	203	-	-392
-	-	-	-	-	-	-	-	-	-	-	-	-
2,333	230	205	-	326	-	-	-	-	-	-	-	-304
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-179	-	-	-131
-173	-0	-145	-	-7	-1,232	-	-	-	-	-361	-	-2,155
138	0	-55	-	3	-0	0	-	-	-55	0	-	-1,766
271	1,259	-	-	326	1,135	-	-	-	-	2,717	-	12,518
216	284	-	-	-	704	-	-	-	-	1,445	-	3,688
-	-	-	-	-	-	-	-	-	-	-	-	100
-	-	-	-	-	-	-	-	-	-	-	-	-
216	284	-	-	-	704	-	-	-	-	1,445	-	3,588
0	263	-	-	-	367	-	-	-	-	-	-	6,048
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
0	263	-	-	-	367	-	-	-	-	-	-	6,048
55	712	-	-	-	64	-	-	-	-	1,273	-	2,456
-	645	-	-	-	6	-	-	-	-	654	-	1,312
-	66	-	-	-	50	-	-	-	-	551	-	924
0	0	-	-	-	-	-	-	-	-	48	-	81
54	1	-	-	-	8	-	-	-	-	19	-	139
-	-	-	-	326	-	-	-	-	-	-	-	326
-	-	-	-	-	3,510	1,708	-	7	255	-	-	12,439
-	-	-	-	121	-	-	-	-	49	-	-	6,803
-978	-289	-	-	-20	-	-	-	-	-	-5	-	-4,378
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-114	-35	-	-	-109	-	-	-	-	-	-	-	-1,155
-1,092	-324	-	-	-7	3,510	1,708	-	7	304	-5	-	13,708
-	1,249	-	-	18	-	-	-	-	-	-	-	1,794
1,915	207	127	-	276	-2,098	-1,708	-	-7	-303	2,841	-	-2,280
-268	-	-	-	-	-2,014	-1,668	-	-	-	2,636	-	-1,647
-60	-	-5	-	-	-85	-41	-	-7	-158	204	-	-255
-	-	-	-	-	-	-	-	-	-	-	-	-
2,243	207	131	-	276	-	-	-	-	-	-	-	-232
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-145	-	-	-145
-87	-0	-145	-	-3	-720	-	-	-	-	-274	-	-1,348
-0	-0	18	-	0	78	-	-	-	-1	0	-	193
736	1,132	-	-	284	769	-	-	-	-	2,561	-	12,067
555	209	-	-	-	489	-	-	-	-	1,401	-	3,941
38	18	-	-	-	60	-	-	-	-	655	-	1,238
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	482
516	191	-	-	-	429	-	-	-	-	746	-	2,220
5	250	-	-	-	220	-	-	-	-	-	-	5,464
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	220	-	-	-	-	-	-	220
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
5	250	-	-	-	-	-	-	-	-	-	-	5,245
176	674	-	-	-	60	-	-	-	-	1,160	-	2,378
-	611	-	-	-	3	-	-	-	-	630	-	1,257
0	62	-	-	-	33	-	-	-	-	530	-	848
2	0	-	-	-	-	-	-	-	-	-	-	30
174	1	-	-	-	24	-	-	-	-	-	-	243
-	-	-	-	284	-	-	-	-	-	-	-	284

## Major Energy Indicators of Peru

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	7,537	11,047	11,127	10,978	12,505	13,260	13,708	17,030
Indigenous Production	8,193	7,832	8,064	9,268	10,525	10,876	12,439	16,945
Import	1,668	5,397	6,515	7,042	7,973	7,510	6,803	7,471
Export	-2,267	-2,094	-3,677	-3,562	-4,225	-4,080	-4,378	-10,295
Final Energy Consumption	6,208	9,200	8,971	8,972	9,841	11,002	12,067	12,518
Industry	1,958	3,336	3,454	3,615	4,000	4,162	3,941	3,688
Transport	2,499	3,386	3,491	3,424	3,591	4,382	5,464	6,048
Residential	-	-	1,213	1,266	1,148	1,274	1,257	1,312
Commerce & Public Services	-	-	436	401	657	562	848	924
Others	1,751	2,478	377	266	444	623	557	546
<b>Coal, Coal Products</b>								
Primary Energy Supply	145	630	928	784	1,018	923	829	733
Indigenous Production	68	12	30	75	78	99	225	60
Import	71	588	807	712	869	648	553	631
Export	-	-	-	-	-	-	-	-70
Transformation Sector	-	-	-330	-382	-388	-329	-258	-257
Power Generation	-	-99	-230	-233	-242	-251	-258	-257
Final Energy Consumption	100	430	591	397	613	579	580	599
Industry	93	430	591	397	613	579	580	599
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	7	0	0	0	0	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	7,149	7,268	8,258	9,342	9,694	9,531	10,792	11,147
Indigenous Production	6,493	4,829	4,074	5,456	5,386	5,611	6,733	7,115
Import	888	3,090	4,698	5,330	5,805	4,979	5,024	4,881
Export	-150	-687	-609	-1,256	-1,442	-925	-1,011	-968
Transformation Sector	-	-	-7,782	-8,701	-9,098	-9,146	-9,571	-10,388
Petroleum Refineries	-7,432	-7,740	-7,782	-8,701	-9,098	-8,871	-9,571	-10,435
<b>Petroleum Products</b>								
Primary Energy Supply	-1,389	158	-2,019	-2,885	-3,268	-2,360	-3,437	-2,533
Import	709	1,720	1,010	1,000	1,299	1,882	1,176	1,876
Export	-2,117	-1,407	-3,068	-2,306	-2,783	-3,155	-3,362	-7,104
Transformation Sector	-	-	7,365	7,805	8,218	8,018	8,826	9,499
Power Generation	-760	-686	-608	-471	-367	-691	-512	-632
Petroleum Refineries	7,449	7,763	7,973	8,277	8,584	8,708	9,338	10,131
Final Energy Consumption	5,020	7,225	6,299	6,202	6,371	7,123	8,157	8,067
Industry	1,210	2,021	1,609	1,787	1,665	1,591	1,470	940
Transport	2,499	3,386	3,491	3,417	3,545	4,252	5,245	5,681
Residential	-	-	609	587	593	663	623	652
Commerce & Public Services	-	-	258	195	197	63	286	323
Others	1,311	1,818	331	215	371	554	533	471
<b>Natural Gas</b>								
Primary Energy Supply	757	1,547	2,221	1,859	2,597	3,321	3,510	5,496
Indigenous Production	757	1,547	2,221	1,859	2,597	3,321	3,510	7,626
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-2,130
Transformation Sector	-	-	-1,558	-1,148	-1,624	-2,040	-2,098	-3,129
Power Generation	-75	-226	-1,263	-1,043	-1,624	-2,040	-2,098	-3,129
Final Energy Consumption	74	1	179	334	535	737	769	1,135
Industry	28	-	179	321	454	594	489	704
Transport	-	-	0	7	46	130	220	367
Residential	-	-	0	1	1	5	3	6
Commerce & Public Services	-	-	-	6	13	-	33	50
Others	46	1	-	0	22	8	24	8
<b>Electricity</b>								
Power Generation	1,132	1,713	2,194	2,354	2,582	2,837	2,841	3,088
Thermal	257	322	534	564	753	1,041	967	1,126
Hydro	875	1,391	1,546	1,685	1,685	1,637	1,708	1,724
Nuclear	-	-	-	-	-	-	-	-
Others	-	-	114	105	144	158	165	237
Final Energy Consumption	1,014	1,490	1,900	2,038	2,321	2,563	2,561	2,717
Industry	627	884	1,075	1,110	1,269	1,397	1,401	1,445
Transport	-	-	-	-	-	-	-	-
Residential	-	-	603	678	554	607	630	654
Commerce & Public Services	-	-	177	199	447	499	530	551
Others	387	606	46	51	51	61	-	67

## Major Economic Indicators of Peru

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	21.69	25.86	27.56	27.87	28.17	28.46	28.77	29.08
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	36.12	53.34	65.49	70.56	76.84	84.37	85.08	92.59
Real Term (Billions of 2000 Price and 2000 PPP)	86.13	127.17	156.15	168.24	183.22	201.18	202.86	220.76
Nominal (Billions of Current USD)	28.97	53.34	79.39	92.32	107.26	126.89	126.95	153.88
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	1,666	2,062	2,376	2,532	2,728	2,964	2,958	3,184
Real Term (2000 Price and 2000 PPP)	3,972	4,917	5,666	6,037	6,505	7,068	7,052	7,593
Nominal (Current USD)	1,336	2,062	2,881	3,313	3,808	4,458	4,413	5,292
Nominal GDP & its Components (Billions of Current PEN) *1								
Gross Domestic Product	5.44	186.14	261.65	302.26	335.53	371.07	382.32	434.74
Household Final Consumption Expenditure, etc.	4.01	132.46	173.05	186.64	206.35	237.35	250.00	269.02
General Government Final Consumption Expenditure	0.43	19.72	26.30	28.81	30.15	33.31	39.45	44.31
Gross Fixed Capital Formation	0.88	37.61	47.97	58.39	72.26	95.97	87.37	109.07
Stock Change	0.02	-0.08	-1.16	2.19	4.38	3.77	-8.19	-0.50
Exports of Goods and Services	0.86	29.79	65.65	86.23	97.59	101.17	91.67	111.60
Imports of Goods and Services	0.75	33.80	50.15	60.01	75.20	100.50	77.98	98.88
Real GDP & its Components (Billions of 1994 PEN) *1								
Gross Domestic Product	81.98	121.06	148.64	160.15	174.41	191.51	193.10	210.14
Household Final Consumption Expenditure, etc.	60.90	86.20	102.86	109.48	118.62	128.96	131.99	139.89
General Government Final Consumption Expenditure	7.38	11.56	13.53	14.56	15.22	15.54	18.09	20.02
Gross Fixed Capital Formation	13.72	23.74	27.70	32.91	40.91	51.99	47.22	58.18
Stock Change	0.21	-0.05	-0.67	1.27	2.08	2.11	-4.25	-0.25
Exports of Goods and Services	9.26	20.08	32.51	32.77	35.02	37.87	36.68	37.60
Imports of Goods and Services	9.50	20.48	27.28	30.85	37.43	44.96	36.58	45.29
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	8.5	9.4	8.8	8.8	8.4	8.2	8.2	7.8
Industry	25.9	27.5	29.0	28.8	29.2	29.2	28.3	28.9
Services, etc.	56.4	53.5	52.4	52.6	52.9	52.8	54.0	53.6
Manufacturing Production Index (2005=100) *2	55.2	78.7	100.0	107.5	119.4	130.2	120.9	137.4
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	3.230	7.028	17.368	23.830	27.882	31.529	26.885	35.565
Imports, c.i.f.	2.634	7.415	12.502	15.312	20.464	29.982	21.865	30.126
Balance of Payments (Billions of Current USD) *2								
Trade Balance	0.399	-0.403	5.286	8.986	8.504	2.569	5.951	6.750
Current Account	-1.419	-1.546	1.148	2.872	1.460	-5.318	0.211	-2.315
Overall Balance	-2.141	-0.130	1.411	3.221	10.344	3.457	1.902	10.970
Foreign Exchange Rate (PEN/USD) *1	0.1879	3.4900	3.2958	3.2740	3.1280	2.9244	3.0115	2.8251
Purchasing Power Parity (PEN/International Dollar) *1	0.0776	1.4637	1.4865	1.5440	1.5295	1.5072	1.5238	1.5741
Price Indices								
GDP Deflator (1994=100) *3	6.6	153.8	176.0	188.7	192.4	193.8	198.0	206.9
Wholesale Price Index (2005=100) *2	5.4	91.1	100.0	103.2	105.8	115.2	113.2	115.2
Consumer Price Index (2005=100) *2	3.6	90.9	100.0	102.0	103.8	109.8	113.0	114.8
Growth Rate (%) *3								
Real GDP	-5.14	2.95	6.83	7.74	8.91	9.80	0.84	8.82
Population	2.08	1.50	1.16	1.12	1.08	1.06	1.06	1.08
Price								
Wholesale Price Index	6,737.4	4.3	2.3	3.2	2.5	8.9	-1.8	1.8
Consumer Price Index	7,481.7	3.8	1.6	2.0	1.8	5.8	2.9	1.5

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"

: PEN means Nuevo Sol, USD means United States Dollar

: PPP means Purchasing Power Parity





## 3.15 Philippines

## Energy Balance Table of Philippines

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	3,510	-	922	-	-	-	-	-	-
Import	5,788	-	9,095	6,639	1,569	-	447	37	3,013
Export	-2,163	-	-862	-857	-24	-267	-	-7	-17
International Marine Bunkers	-	-	-	-183	-	-	-	-	-34
International Aviation Bunkers	-	-	-	-989	-	-	-989	-	-
Stock Changes	-104	-	-100	-83	-11	10	-	-5	-48
<b>Total Primary Energy Supply</b>	<b>7,030</b>	<b>-</b>	<b>9,054</b>	<b>4,528</b>	<b>1,534</b>	<b>-257</b>	<b>-542</b>	<b>25</b>	<b>2,914</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-5,090</b>	<b>-</b>	<b>-8,650</b>	<b>7,071</b>	<b>1,568</b>	<b>185</b>	<b>775</b>	<b>138</b>	<b>2,880</b>
Main Activity Producer	-5,090	-	-	-1,487	-	-	-	-	-337
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-8,733	8,558	1,568	185	775	138	3,217
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	83	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-7	-	-404	128	-22	73	-1	-16	-142
<b>Total Final Energy Consumption</b>	<b>1,933</b>	<b>-</b>	<b>-</b>	<b>11,727</b>	<b>3,081</b>	<b>-</b>	<b>232</b>	<b>147</b>	<b>5,651</b>
<b>Industry Sector</b>	<b>1,933</b>	<b>-</b>	<b>-</b>	<b>1,431</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18</b>	<b>478</b>
Iron and Steel	81	-	-	463	-	-	-	1	99
Chemical & Petrochemical	18	-	-	170	-	-	-	17	55
Non-metallic Minerals	1,745	-	-	9	-	-	-	-	1
Other Industries	89	-	-	789	-	-	-	1	323
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8,087</b>	<b>3,073</b>	<b>-</b>	<b>232</b>	<b>-</b>	<b>4,423</b>
Domestic Air Transport	-	-	-	236	4	-	232	-	-
Road	-	-	-	7,149	3,021	-	-	-	4,055
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	702	49	-	-	-	368
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,088</b>	<b>8</b>	<b>-</b>	<b>-</b>	<b>128</b>	<b>750</b>
Residential	-	-	-	930	-	-	-	127	-
Commerce and Public Services	-	-	-	942	-	-	-	-	550
Agriculture	-	-	-	22	0	-	-	-	21
Non-specified Others	-	-	-	193	8	-	-	1	180
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>120</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	2,474	-	962	-	-	-	-	-	-
Import	3,888	-	6,772	7,261	1,631	-	503	61	3,211
Export	-1,052	-	-257	-492	-77	-126	-	-	-33
International Marine Bunkers	-	-	-	-198	-	-	-	-	-33
International Aviation Bunkers	-	-	-	-976	-	-	-976	-	-
Stock Changes	-	-	428	-159	-65	12	-	-51	-98
<b>Total Primary Energy Supply</b>	<b>5,310</b>	<b>-</b>	<b>7,905</b>	<b>5,436</b>	<b>1,488</b>	<b>-115</b>	<b>-473</b>	<b>10</b>	<b>3,046</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-4,442</b>	<b>-</b>	<b>-6,827</b>	<b>5,739</b>	<b>1,206</b>	<b>298</b>	<b>667</b>	<b>127</b>	<b>2,225</b>
Main Activity Producer	-4,442	-	-	-1,178	-	-	-	-	-261
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-6,940	6,917	1,206	298	667	127	2,486
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	114	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	757	-	-1,079	198	274	-183	32	22	291
<b>Total Final Energy Consumption</b>	<b>1,624</b>	<b>-</b>	<b>-</b>	<b>11,373</b>	<b>2,968</b>	<b>-</b>	<b>225</b>	<b>159</b>	<b>5,562</b>
<b>Industry Sector</b>	<b>1,624</b>	<b>-</b>	<b>-</b>	<b>1,340</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>466</b>
Iron and Steel	76	-	-	140	-	-	-	0	42
Chemical & Petrochemical	17	-	-	188	-	-	-	18	49
Non-metallic Minerals	1,293	-	-	152	-	-	-	0	27
Other Industries	238	-	-	860	-	-	-	2	348
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,952</b>	<b>2,964</b>	<b>-</b>	<b>225</b>	<b>-</b>	<b>4,450</b>
Domestic Air Transport	-	-	-	229	4	-	225	-	-
Road	-	-	-	7,116	2,911	-	-	-	4,121
Rail	-	-	-	0	-	-	-	-	0
Inland Waterways	-	-	-	607	49	-	-	-	329
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,969</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>139</b>	<b>646</b>
Residential	-	-	-	938	-	-	-	138	-
Commerce and Public Services	-	-	-	826	-	-	-	-	454
Agriculture	-	-	-	22	0	-	-	0	19
Non-specified Others	-	-	-	183	4	-	-	1	173
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>112</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	3,049	671	-	8,544	6,491	-	-	23,188
599	807	-	-	168	-	-	-	-	95	-	-	21,617
-195	-1	-	-	-344	-	-	-	-	-	-	-	-3,883
-149	-	-	-	-	-	-	-	-	-	-	-	-183
-	-	-	-	-	-	-	-	-	-	-	-	-989
-15	-17	-	-	2	-	-	-	-	31	-	-	-256
239	789	-	-	-174	3,049	671	-	8,544	6,617	-	-	39,494
-	-	-	-	-	-	-	-	-	-	-	-	-
712	388	-	-	424	-2,859	-671	-	-8,544	-1,543	5,826	-	-14,461
-1,150	-	-	-	-	-2,859	-671	-	-8,544	-16	5,826	-	-12,842
-	-	-	-	-	-	-	-	-	-	-	-	-
1,863	388	-	-	424	-	-	-	-	-	-	-	-175
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-1,527	-	-	-1,444
-	-	-	-	-	-118	-	-	-	-	-1,073	-	-1,191
380	-13	-	-	-130	0	-	-	-	0	-	-	-283
1,331	1,164	-	-	120	72	-	-	-	5,074	4,753	-	23,559
862	72	-	-	-	71	-	-	-	1,012	1,598	-	6,045
346	17	-	-	-	-	-	-	-	-	326	-	870
97	1	-	-	-	-	-	-	-	-	97	-	285
-	8	-	-	-	-	-	-	-	-	122	-	1,875
419	46	-	-	-	71	-	-	-	1,012	1,053	-	3,014
285	74	-	-	-	0	-	-	-	-	10	-	8,097
-	-	-	-	-	-	-	-	-	-	-	-	236
-	74	-	-	-	0	-	-	-	-	-	-	7,150
-	-	-	-	-	-	-	-	-	-	10	-	10
285	-	-	-	-	-	-	-	-	-	-	-	702
-	-	-	-	-	-	-	-	-	-	-	-	-
184	1,018	-	-	-	-	-	-	-	4,063	3,146	-	9,296
-	803	-	-	-	-	-	-	-	3,735	1,620	-	6,285
177	215	-	-	-	-	-	-	-	328	1,398	-	2,668
1	-	-	-	-	-	-	-	-	-	112	-	135
5	-	-	-	-	-	-	-	-	-	15	-	209
-	-	-	-	120	-	-	-	-	-	-	-	120
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3,237	842	-	8,884	6,896	-	-	23,295
799	887	-	-	169	-	-	-	-	44	-	-	17,965
-255	-	-	-	-	-	-	-	-	-	-	-	-1,802
-164	-	-	-	-	-	-	-	-	-	-	-	-198
-	-	-	-	-	-	-	-	-	-	-	-	-976
65	-21	-	-	-	-	-	-	-	-	-	-	269
445	866	-	-	169	3,237	842	-	8,884	6,939	-	-	38,554
-	-	-	-	-	-	-	-	-	-	-	-	-
639	303	-	-	275	-3,064	-842	-	-8,884	-1,461	5,325	-	-14,455
-917	-	-	-	-	-3,064	-842	-	-8,884	-6	5,325	-	-13,091
-	-	-	-	-	-	-	-	-	-	-	-	-
1,556	303	-	-	275	-	-	-	-	-	-	-	-24
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-1,455	-	-	-1,341
-	-	-	-	-	-103	-	-	-	-	-303	-	-406
107	-13	-	-	-332	0	-	-	-	3	-645	-	-766
1,190	1,157	-	-	112	71	-	-	-	5,481	4,377	-	22,928
779	75	-	-	-	70	-	-	-	1,322	1,469	-	5,826
84	14	-	-	-	-	-	-	-	-	300	-	516
99	22	-	-	-	-	-	-	-	-	89	-	294
114	11	-	-	-	-	-	-	-	-	112	-	1,557
482	27	-	-	-	70	-	-	-	1,322	969	-	3,459
230	84	-	-	-	0	-	-	-	-	10	-	7,962
-	-	-	-	-	-	-	-	-	-	-	-	229
-	84	-	-	-	0	-	-	-	-	-	-	7,117
-	-	-	-	-	-	-	-	-	-	10	-	10
230	-	-	-	-	-	-	-	-	-	-	-	607
-	-	-	-	-	-	-	-	-	-	-	-	-
182	998	-	-	-	-	-	-	-	4,159	2,898	-	9,026
-	799	-	-	-	-	-	-	-	3,835	1,508	-	6,280
174	199	-	-	-	-	-	-	-	324	1,269	-	2,419
3	-	-	-	-	-	-	-	-	-	107	-	129
6	-	-	-	-	-	-	-	-	-	15	-	197
-	-	-	-	112	-	-	-	-	-	-	-	112

## Major Energy Indicators of Philippines

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	28,309	38,969	37,823	37,603	37,413	38,571	38,554	39,494
Indigenous Production	17,222	19,552	21,400	21,535	22,183	22,827	23,295	23,188
Import	12,555	21,760	18,943	19,385	20,000	20,180	17,965	21,617
Export	-641	-1,753	-1,954	-2,365	-3,786	-3,494	-1,802	-3,883
Final Energy Consumption	19,474	23,502	22,371	21,717	22,402	22,425	22,926	23,559
Industry	4,682	5,352	5,355	5,476	6,279	6,159	5,826	6,045
Transport	4,290	7,695	7,867	7,314	7,172	7,447	7,962	8,097
Residential	9,164	8,172	6,820	6,526	6,340	6,311	6,280	6,285
Commerce & Public Services	841	1,726	1,962	2,053	2,105	2,055	2,419	2,668
Others	497	557	367	348	506	453	438	463
<b>Coal, Coal Products</b>								
Primary Energy Supply	1,358	4,539	5,230	5,316	5,449	6,225	5,310	7,030
Indigenous Production	649	715	1,520	1,243	1,791	1,905	2,474	3,510
Import	709	3,824	3,710	4,073	4,079	4,791	3,888	5,788
Export	-	-	-	-	-422	-472	-1,052	-2,163
Transformation Sector	-559	-3,784	-4,134	-3,714	-3,972	-4,558	-4,442	-5,090
Power Generation	-559	-3,784	-4,134	-3,714	-3,972	-4,558	-4,442	-5,090
Final Energy Consumption	696	840	1,184	1,324	1,419	1,798	1,624	1,933
Industry	696	840	1,184	1,324	1,419	1,798	1,624	1,933
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	10,825	15,121	10,493	10,298	10,683	8,997	7,905	9,054
Indigenous Production	229	55	765	702	827	715	962	922
Import	10,597	15,033	10,301	10,354	10,331	9,283	6,772	9,095
Export	-	-	-738	-678	-801	-653	-257	-862
Transformation Sector	-10,242	-14,721	-9,958	-9,897	-10,045	-8,718	-6,827	-8,650
Petroleum Refineries	-10,242	-14,721	-9,958	-9,897	-10,045	-8,718	-6,940	-8,733
<b>Petroleum Products</b>								
Primary Energy Supply	-220	527	2,984	2,397	1,715	3,134	5,436	4,528
Import	1,249	2,903	4,931	4,957	5,588	6,097	7,261	6,639
Export	-641	-1,753	-1,216	-1,687	-2,563	-2,369	-492	-857
Transformation Sector	7,939	12,333	8,126	8,409	8,445	7,509	5,739	7,071
Power Generation	-2,135	-1,925	-1,411	-1,032	-1,045	-1,083	-1,178	-1,487
Petroleum Refineries	10,074	14,258	9,537	9,441	9,490	8,591	6,917	8,558
Final Energy Consumption	7,833	12,592	11,374	10,616	11,082	10,733	11,373	11,727
Industry	2,225	2,405	1,669	1,547	2,136	1,539	1,340	1,431
Transport	4,290	7,690	7,860	7,305	7,163	7,437	7,952	8,087
Residential	766	1,411	1,000	892	805	894	938	930
Commerce & Public Services	98	554	520	565	515	519	826	942
Others	454	532	325	307	463	343	316	336
<b>Natural Gas</b>								
Primary Energy Supply	-	9	2,719	2,687	3,054	3,214	3,237	3,049
Indigenous Production	-	9	2,719	2,687	3,054	3,214	3,237	3,049
Import	-	-	-	-	-	-	-	-
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-9	-2,610	-2,545	-2,738	-3,022	-3,064	-2,859
Power Generation	-	-9	-2,610	-2,545	-2,738	-3,022	-3,064	-2,859
Final Energy Consumption	-	-	12	56	78	71	71	72
Industry	-	-	12	56	78	70	70	71
Transport	-	-	0	-	-	0	0	0
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	2,264	3,895	4,865	4,883	5,127	5,231	5,325	5,826
Thermal	1,079	2,224	3,290	3,124	3,507	3,457	3,892	4,894
Hydro	521	671	721	855	736	846	842	671
Nuclear	-	-	-	-	-	-	-	-
Others	664	1,000	853	905	884	928	591	261
Final Energy Consumption	1,824	3,144	3,884	3,928	4,129	4,232	4,377	4,753
Industry	855	1,135	1,325	1,344	1,397	1,465	1,469	1,598
Transport	-	5	8	8	9	10	10	10
Residential	482	1,109	1,379	1,361	1,408	1,431	1,508	1,620
Commerce & Public Services	444	870	1,130	1,173	1,272	1,216	1,269	1,398
Others	43	25	42	41	42	110	121	128

## Major Economic Indicators of Philippines

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	61.63	77.31	85.55	87.12	88.65	90.17	91.70	93.26
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	61.10	81.03	101.40	106.72	113.78	118.51	119.87	129.02
Real Term (Billions of 2000 Price and 2000 PPP)	139.50	185.00	231.53	243.67	259.79	270.58	273.69	294.58
Nominal (Billions of Current USD)	44.31	81.03	103.07	122.21	149.36	174.20	168.33	199.59
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	991	1,048	1,185	1,225	1,283	1,314	1,307	1,383
Real Term (2000 Price and 2000 PPP)	2,264	2,393	2,707	2,797	2,930	3,001	2,985	3,159
Nominal (Current USD)	719	1,048	1,205	1,403	1,685	1,932	1,836	2,140
Nominal GDP & its Components (Billions of Current PHP) *1								
Gross Domestic Product	1,077.24	3,580.71	5,677.75	6,271.16	6,892.72	7,720.90	8,026.14	9,003.48
Household Final Consumption Expenditure, etc.	767.06	2,585.28	4,259.13	4,677.99	5,064.46	5,739.59	5,993.43	6,442.03
General Government Final Consumption Expenditure	108.84	409.05	513.25	575.72	639.99	681.89	791.40	875.29
Gross Fixed Capital Formation	248.95	791.34	1,129.94	1,261.93	1,371.62	1,518.17	1,526.10	1,847.75
Stock Change	11.21	-133.65	93.64	-132.56	-176.60	-28.96	-194.44	1.63
Exports of Goods and Services	296.42	1,839.39	2,619.54	2,920.98	2,981.85	2,849.94	2,587.01	3,133.51
Imports of Goods and Services	358.55	1,910.69	2,937.76	3,032.91	2,988.59	3,039.74	2,677.36	3,296.73
Real GDP & its Components (Billions of 1985 PHP) *1								
Gross Domestic Product	2,700.07	3,580.71	4,481.28	4,716.23	5,028.29	5,237.10	5,297.24	5,701.54
Household Final Consumption Expenditure, etc.	1,774.61	2,585.28	3,301.79	3,439.88	3,598.44	3,730.86	3,817.91	3,945.83
General Government Final Consumption Expenditure	347.72	409.05	416.87	461.11	492.95	494.37	548.30	570.21
Gross Fixed Capital Formation	609.10	791.34	883.34	930.97	979.75	1,010.62	992.95	1,182.21
Stock Change	48.57	-133.65	61.68	-128.85	-181.42	-25.81	-93.61	1.44
Exports of Goods and Services	870.49	1,839.39	2,212.82	2,491.58	2,659.71	2,588.55	2,385.81	2,886.13
Imports of Goods and Services	934.09	1,910.69	2,395.23	2,478.45	2,521.14	2,561.49	2,354.11	2,884.28
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	15.2	14.0	13.3	13.1	12.9	12.8	12.5	11.6
Industry	35.4	34.5	32.7	32.5	32.2	32.4	31.5	32.6
Services, etc.	49.4	51.6	54.0	54.4	54.9	54.8	56.0	55.8
Manufacturing Production Index (2005=100) *2	23.4	68.9	100.0	101.6	98.2	102.5	89.0	104.0
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	8.117	39.783	41.255	47.410	50.466	49.078	38.436	51.496
Imports, c.i.f.	13.042	37.027	49.487	54.078	57.996	60.420	45.878	58.468
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-4.020	-5.971	-7.773	-6.732	-8.391	-12.885	-8.842	-10.966
Current Account	-2.695	-2.228	1.980	5.341	7.112	3.627	9.358	8.924
Overall Balance	-0.045	-0.477	1.662	5.242	8.707	0.867	6.119	16.593
Foreign Exchange Rate (PHP/USD) *1	24.3105	44.1923	55.0855	51.3143	46.1484	44.3233	47.6797	45.1097
Purchasing Power Parity (PHP/International Dollar) *1	9.4852	19.3549	21.7549	22.1180	22.1591	23.3163	23.7108	24.4304
Price Indices								
GDP Deflator (2000=100) *3	39.9	100.0	126.7	133.0	137.1	147.4	151.5	157.9
Wholesale Price Index (2005=100) *2	N.A.	64.1	100.0	109.4	110.4	114.9	113.3	107.6
Consumer Price Index (2005=100) *2	35.5	77.0	100.0	106.2	109.2	119.4	123.3	128.0
Growth Rate (%) *3								
Real GDP	3.04	4.41	4.78	5.24	6.62	4.15	1.15	7.63
Population	2.54	2.17	1.92	1.84	1.76	1.72	1.70	1.70
Price								
Wholesale Price Index	N.A.	12.5	9.1	9.4	0.8	4.1	-1.4	-5.0
Consumer Price Index	12.7	4.0	7.6	6.2	2.8	9.3	3.2	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"

: PHP means Philippine Peso, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.16 Russia



## Energy Balance Table of Russia

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	180,041	-	506,545	-	-	-	-	-	
Import	15,174	136	1,105	2,833	523	-	-	525	
Export	-84,285	-1,585	-248,268	-111,955	-3,114	-	-	-42,347	
International Marine Bunkers	-	-	-	-1,531	-	-	-	-912	
International Aviation Bunkers	-	-	-	-6,238	-	-	-6,238	-	
Stock Changes	5,424	1	-2,455	-870	-133	-	-	-392	
<b>Total Primary Energy Supply</b>	<b>116,354</b>	<b>-1,448</b>	<b>256,927</b>	<b>-117,761</b>	<b>-2,724</b>	<b>-</b>	<b>-6,238</b>	<b>-43,126</b>	
Transfers	-	-	-	-	-	-	-	-	
<b>Total Transformation Sector</b>	<b>-92,947</b>	<b>11,494</b>	<b>-251,967</b>	<b>233,730</b>	<b>37,783</b>	<b>13,088</b>	<b>11,423</b>	<b>69,136</b>	
Main Activity Producer	-40,629	-	-	-1,579	-	-	-	-	
Autoproducers	-16,269	-5,209	-787	-8,744	-	-	-	-2,029	
Gas Processing	-	-	-	-	-	-	-	-	
Petroleum Refineries	-	-	-251,180	244,052	37,783	13,088	11,423	71,165	
Coal Transformation	-36,050	16,702	-	-	-	-	-	-	
Other Transformation	-	-	-	-	-	-	-	-	
Loss & Own Use	-729	-1,500	-5,064	-12,261	-	-	-	-2,346	
Discrepancy	-17,344	5,466	214	-51	-	-	-0	-15	
<b>Total Final Energy Consumption</b>	<b>5,333</b>	<b>14,012</b>	<b>110</b>	<b>103,657</b>	<b>35,059</b>	<b>13,088</b>	<b>5,185</b>	<b>23,648</b>	
<b>Industry Sector</b>	<b>1,258</b>	<b>13,985</b>	<b>79</b>	<b>11,366</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,591</b>	
Iron and Steel	17	13,222	-	494	-	-	-	-	
Chemical & Petrochemical	85	116	27	6,250	-	-	-	43	
Non-metallic Minerals	595	532	40	182	-	-	-	74	
Other Industries	562	116	12	4,441	-	-	-	2,474	
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>56,298</b>	<b>35,059</b>	<b>-</b>	<b>5,185</b>	<b>15,258</b>	
Domestic Air Transport	-	-	-	5,244	25	-	5,185	19	
Road	-	-	-	47,769	34,701	-	-	12,721	
Rail	-	-	-	1,632	90	-	-	1,469	
Inland Waterways	-	-	-	629	5	-	-	432	
Pipeline Transport	-	-	-	336	87	-	-	238	
Non-specified Transport	-	-	-	688	150	-	-	379	
<b>Other Sector</b>	<b>4,075</b>	<b>26</b>	<b>30</b>	<b>10,149</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,799</b>	
Residential	1,547	2	-	4,719	-	-	-	1,380	
Commerce and Public Services	2,449	24	-	1,663	-	-	-	1,185	
Agriculture	73	-	12	2,964	-	-	-	2,877	
Non-specified Others	6	-	18	804	-	-	-	357	
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25,844</b>	<b>-</b>	<b>13,088</b>	<b>-</b>	<b>-</b>	
<b>2009</b>									
Indigenous Production	153,640	-	493,645	-	-	-	-	-	
Import	14,379	152	1,793	808	234	-	-	261	
Export	-67,384	-1,288	-250,143	-101,096	-4,731	-	-	-40,450	
International Marine Bunkers	-	-	-	-	-	-	-	-	
International Aviation Bunkers	-	-	-	-5,858	-	-	-5,858	-	
Stock Changes	-4,309	81	-1,635	451	-284	-	-	137	
<b>Total Primary Energy Supply</b>	<b>96,326</b>	<b>-1,055</b>	<b>243,659</b>	<b>-105,695</b>	<b>-4,780</b>	<b>-</b>	<b>-5,858</b>	<b>-40,051</b>	
Transfers	-	-	-	-	-	-	-	-	
<b>Total Transformation Sector</b>	<b>-100,719</b>	<b>9,844</b>	<b>-241,004</b>	<b>219,345</b>	<b>37,654</b>	<b>12,587</b>	<b>10,727</b>	<b>66,444</b>	
Main Activity Producer	-51,348	-	-	-3,549	-	-	-	-	
Autoproducers	-15,582	-4,790	-752	-8,484	-	-	-	-1,932	
Gas Processing	-	-	-	-	-	-	-	-	
Petroleum Refineries	-	-	-240,252	231,551	37,654	12,587	10,727	68,376	
Coal Transformation	-33,788	14,634	-	-	-	-	-	-	
Other Transformation	-	-	-	-174	-	-	-	-	
Loss & Own Use	-575	-1,436	-3,090	-12,159	-	-	-	-2,043	
Discrepancy	10,670	5,213	476	24	-	-	-	19	
<b>Total Final Energy Consumption</b>	<b>5,702</b>	<b>12,566</b>	<b>41</b>	<b>101,515</b>	<b>32,874</b>	<b>12,587</b>	<b>4,869</b>	<b>24,368</b>	
<b>Industry Sector</b>	<b>1,189</b>	<b>12,522</b>	<b>13</b>	<b>10,828</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,323</b>	
Iron and Steel	21	11,617	1	473	-	-	-	136	
Chemical & Petrochemical	84	496	-	6,119	-	-	-	33	
Non-metallic Minerals	646	170	-	266	-	-	-	159	
Other Industries	438	239	12	3,971	-	-	-	1,995	
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>55,017</b>	<b>32,874</b>	<b>-</b>	<b>4,869</b>	<b>16,444</b>	
Domestic Air Transport	-	-	-	4,869	-	-	4,869	-	
Road	-	-	-	46,646	32,874	-	-	13,424	
Rail	-	-	-	1,788	-	-	-	1,717	
Inland Waterways	-	-	-	1,053	-	-	-	776	
Pipeline Transport	-	-	-	244	-	-	-	233	
Non-specified Transport	-	-	-	416	-	-	-	294	
<b>Other Sector</b>	<b>4,513</b>	<b>45</b>	<b>28</b>	<b>9,923</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,602</b>	
Residential	1,911	0	-	4,484	-	-	-	1,246	
Commerce and Public Services	2,506	44	-	1,598	-	-	-	1,089	
Agriculture	93	-	13	3,037	-	-	-	2,949	
Non-specified Others	3	-	15	803	-	-	-	317	
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25,747</b>	<b>-</b>	<b>12,587</b>	<b>-</b>	<b>-</b>	

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	540,188	14,482	44,434	435	6,955	-	-	1,293,080
831	134	-	-	820	3,498	-	-	-	0	141	-	22,887
-59,767	-3,618	-	-	-3,109	-154,175	-	-	-	-0	-1,642	-	-601,910
-618	-	-	-	-1	-	-	-	-	-	-	-	-1,531
-	-	-	-	-	-	-	-	-	-	-	-	-6,238
-287	-57	-	-	-	-6,708	-	-	-	-13	-	-	-4,620
-59,841	-3,541	-	-	-2,290	382,803	14,482	44,434	435	6,943	-1,500	-	701,668
-	-	-	-	-	-	-	-	-	-	-	-	-
64,251	14,941	13,321	-	9,786	-224,262	-14,482	-44,434	-435	-4,457	89,271	143,681	-154,808
-1,579	-	-	-	-	-139,983	-14,404	-44,434	-435	-	83,947	52,186	-105,330
-5,793	-33	-889	-	-	-82,602	-78	-	-	-4,457	5,324	91,495	-21,326
-	-	-	-	-	-0	-	-	-	-	-	-	-0
71,623	14,974	14,210	-	9,786	-	-	-	-	-	-	-	-7,128
-	-	-	-	-	-	-	-	-	-	-	-	-19,347
-	-	-	-	-	-1,677	-	-	-	-	-	-	-1,677
-1,838	-81	-7,995	-	-	-15,292	-	-	-	-139	-25,275	-27,782	-88,043
-40	4	-0	-	-0	-20	0	-0	-	-0	0	-1,262	-12,997
2,532	11,323	5,326	-	7,495	143,229	-	-	-	2,347	62,495	114,636	445,819
1,314	603	5,326	-	1,531	32,366	-	-	-	357	28,109	44,516	132,036
494	-	-	-	-	13,188	-	-	-	64	4,786	7,962	39,733
71	480	5,325	-	331	3,339	-	-	-	27	3,980	13,635	27,458
80	26	1	-	-	10,452	-	-	-	7	1,461	2,227	15,496
669	97	-	-	1,200	5,386	-	-	-	259	17,882	20,691	49,349
417	378	-	-	-	32,858	-	-	-	-	7,334	-	96,490
-	14	-	-	-	-	-	-	-	-	-	-	5,244
-	347	-	-	-	113	-	-	-	-	-	-	47,882
72	1	-	-	-	-	-	-	-	-	4,003	-	5,634
192	-	-	-	-	-	-	-	-	-	-	-	629
-	11	-	-	-	32,745	-	-	-	-	2,235	-	35,315
154	4	-	-	-	-	-	-	-	-	1,097	-	1,785
800	3,550	-	-	-	44,020	-	-	-	1,990	27,051	70,121	157,463
67	3,272	-	-	-	40,442	-	-	-	984	11,154	52,630	111,477
279	199	-	-	-	3,022	-	-	-	842	14,524	14,502	37,027
8	79	-	-	-	553	-	-	-	165	1,349	2,954	8,070
447	-	-	-	-	2	-	-	-	-	24	34	889
-	6,792	-	-	5,964	33,986	-	-	-	-	-	-	59,830
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	474,485	15,146	42,652	399	6,410	-	-	1,186,378
305	8	-	-	-	6,677	-	-	-	-	264	-	24,072
-53,717	-2,198	-	-	-	-136,038	-	-	-	-	-1,541	-	-557,489
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-5,858
625	-27	-	-	-	5,270	-	-	-	-43	-	-	-186
-52,788	-2,218	-	-	-	350,395	15,146	42,652	399	6,367	-1,278	-	646,917
-	-	-	-	-	-	-	-	-	-	-	-	-
57,251	13,878	13,423	-	7,381	-205,620	-15,146	-42,652	-399	-3,930	85,310	135,035	-159,937
-3,549	-	-	-	-	-128,839	-15,066	-42,652	-399	-	80,807	47,589	-113,458
-5,642	-26	-883	-	-	-75,391	-80	-	-	-3,930	4,503	87,446	-17,059
-	-	-	-	-	-	-	-	-	-	-	-	-
66,442	14,078	14,306	-	7,381	-	-	-	-	-	-	-	-8,701
-	-	-	-	-	-	-	-	-	-	-	-	-19,155
-	-174	-	-	-	-1,390	-	-	-	-	-	-	-1,564
-1,761	-81	-8,274	-	-	-16,240	-	-	-	-140	-24,997	-26,514	-85,151
-0	-0	5	-	-	7	-	0	-	-1	-20	0	16,371
2,703	11,579	5,154	-	7,381	128,542	-	-	-	2,296	59,016	108,521	418,200
1,353	1,042	5,154	-	957	29,407	-	-	-	367	26,782	38,752	119,860
328	9	-	-	-	12,041	-	-	-	59	4,683	7,315	36,210
111	826	5,149	-	-	2,577	-	-	-	30	3,739	10,391	23,436
80	22	5	-	-	10,114	-	-	-	7	1,380	1,952	14,535
835	185	-	-	957	4,675	-	-	-	271	16,979	19,094	45,679
460	369	-	-	-	27,617	-	-	-	-	6,984	-	89,617
-	-	-	-	-	-	-	-	-	-	-	-	4,869
-	347	-	-	-	101	-	-	-	-	-	-	46,747
71	1	-	-	-	-	-	-	-	-	3,909	-	5,698
277	-	-	-	-	-	-	-	-	-	-	-	1,053
-	11	-	-	-	27,515	-	-	-	-	2,077	-	29,836
113	10	-	-	-	-	-	-	-	-	998	-	1,414
889	3,432	-	-	-	45,219	-	-	-	1,929	25,251	69,769	156,676
112	3,127	-	-	-	41,682	-	-	-	889	10,647	49,810	109,424
284	225	-	-	-	2,652	-	-	-	719	13,281	17,221	38,021
8	80	-	-	-	884	-	-	-	320	1,299	2,697	8,343
486	-	-	-	-	2	-	-	-	0	23	41	888
-	6,736	-	-	6,425	26,299	-	-	-	-	-	-	52,046

## Major Energy Indicators of Russia

ktoe

	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	877,804	619,159	651,723	670,652	672,572	688,489	646,917	701,668
Indigenous Production	1,292,815	977,902	1,203,266	1,226,995	1,239,119	1,253,940	1,186,378	1,293,080
Import	120,460	32,884	23,182	24,186	23,432	28,948	24,072	22,887
Export	-533,033	-382,450	-562,478	-562,510	-575,766	-565,522	-557,489	-601,910
Final Energy Consumption	625,047	418,764	412,403	425,098	428,306	434,931	418,200	445,819
Industry	208,693	129,459	124,153	129,868	125,990	125,388	119,860	132,036
Transport	115,870	74,478	88,569	91,534	92,511	97,204	89,617	96,490
Residential	83,506	140,269	110,564	115,047	112,452	113,968	109,424	111,477
Commerce & Public Services	36,278	22,640	34,727	34,718	39,275	40,612	38,021	37,027
Others	180,700	51,917	54,391	53,930	58,078	57,759	61,277	68,789
<b>Coal, Coal Products</b>								
Primary Energy Supply	191,071	119,969	112,637	115,726	110,959	117,069	95,271	114,905
Indigenous Production	192,401	128,535	157,426	159,343	162,959	167,181	153,640	180,041
Import	35,088	15,373	13,644	15,554	14,212	18,839	14,530	15,310
Export	-40,423	-25,477	-55,763	-59,848	-65,026	-64,341	-68,671	-85,871
Transformation Sector	-129,024	-99,096	-98,233	-99,226	-93,472	-97,993	-90,875	-81,453
Power Generation	-106,725	-82,408	-79,402	-83,950	-77,402	-84,143	-71,720	-62,106
Final Energy Consumption	54,735	18,857	13,674	15,031	15,938	16,634	18,268	19,345
Industry	14,581	8,883	7,997	9,407	11,306	10,380	13,711	15,244
Transport	0	-	-	-	-	-	-	-
Residential	11,881	8,947	2,829	3,214	2,568	3,014	1,911	1,548
Commerce & Public Services	20,581	387	2,674	2,269	1,973	3,151	2,550	2,474
Others	7,692	638	175	140	91	88	96	79
<b>Crude Oil</b>								
Primary Energy Supply	321,940	183,808	216,841	228,630	232,178	244,532	243,659	256,927
Indigenous Production	526,257	323,259	468,711	478,134	490,041	488,534	493,645	506,545
Import	18,593	5,921	2,438	2,332	2,706	2,468	1,793	1,105
Export	-222,909	-145,136	-253,850	-249,687	-259,872	-244,313	-250,143	-248,268
Transformation Sector	-308,936	-181,770	-213,894	-225,754	-229,024	-240,162	-241,004	-251,967
Petroleum Refineries	-307,422	-180,704	-213,129	-224,975	-228,321	-239,431	-240,252	-251,180
<b>Petroleum Products</b>								
Primary Energy Supply	-59,218	-57,674	-87,610	-94,797	-99,748	-101,364	-105,695	-117,761
Import	7,329	307	27	44	37	980	808	2,833
Export	-64,254	-53,281	-83,506	-87,285	-94,273	-97,252	-101,096	-111,955
Transformation Sector	209,090	157,699	192,071	203,092	213,302	220,839	219,345	233,730
Power Generation	-60,555	-22,162	-15,999	-15,979	-13,256	-11,851	-12,033	-10,322
Petroleum Refineries	269,645	179,861	208,801	219,787	227,166	233,349	231,551	244,052
Final Energy Consumption	144,746	89,706	91,815	95,600	99,476	105,943	101,515	103,657
Industry	24,445	16,952	10,263	10,865	12,517	13,036	10,828	11,366
Transport	72,870	42,290	47,553	50,569	50,098	54,623	55,017	56,298
Residential	8,769	4,354	6,331	6,459	6,813	7,588	4,484	4,719
Commerce & Public Services	421	988	844	955	2,050	2,093	1,598	1,663
Others	38,241	25,121	26,825	26,752	27,998	28,602	29,588	29,612
<b>Natural Gas</b>								
Primary Energy Supply	367,391	319,008	349,670	358,707	366,066	366,277	350,395	382,803
Indigenous Production	516,822	470,740	515,842	525,874	521,998	534,798	474,485	540,188
Import	56,438	10,526	6,201	5,816	5,989	6,394	6,677	3,498
Export	-201,719	-156,592	-167,423	-163,889	-155,007	-157,831	-136,038	-154,175
Transformation Sector	-227,750	-189,417	-205,838	-211,360	-215,481	-213,702	-205,620	-224,262
Power Generation	-227,750	-186,415	-203,784	-209,712	-214,063	-212,150	-204,230	-222,585
Final Energy Consumption	143,123	117,174	128,052	130,695	131,172	133,977	128,542	143,229
Industry	30,494	25,843	30,117	31,594	26,850	30,136	29,407	32,366
Transport	34,054	26,939	33,844	33,568	34,953	35,418	27,617	32,858
Residential	47,135	43,124	38,144	39,565	38,822	39,911	41,682	40,442
Commerce & Public Services	8,783	2,456	3,559	3,776	5,503	3,919	2,652	3,022
Others	22,659	18,812	22,387	22,193	25,045	24,592	27,185	34,542
<b>Electricity</b>								
Power Generation	93,065	75,488	81,965	85,638	87,319	89,473	85,310	89,271
Thermal	64,520	46,133	49,871	52,593	54,182	57,103	51,977	55,446
Hydro	14,269	14,222	15,016	15,074	15,392	14,337	15,146	14,482
Nuclear	10,287	11,363	12,989	13,597	13,910	14,174	14,217	14,811
Others	3,989	3,770	4,090	4,374	3,834	3,859	3,970	4,531
Final Energy Consumption	71,090	52,333	55,898	58,600	60,281	62,390	59,016	62,495
Industry	41,428	26,867	28,369	30,406	30,339	30,967	26,782	28,109
Transport	8,924	5,239	7,153	7,385	7,452	7,146	6,984	7,334
Residential	9,197	12,102	9,367	9,677	9,970	10,074	10,647	11,154
Commerce & Public Services	5,752	5,527	9,541	9,666	11,106	12,844	13,281	14,524
Others	5,789	2,598	1,468	1,466	1,415	1,358	1,322	1,373

## Major Economic Indicators of Russia

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	148.29	146.30	143.15	142.50	142.10	141.95	141.91	141.75
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	385.90	259.72	349.72	378.23	410.52	432.06	398.22	415.35
Real Term (Billions of 2000 Price and 2000 PPP)	1,485.36	999.66	1,346.09	1,455.84	1,580.09	1,663.02	1,532.77	1,598.68
Nominal (Billions of Current USD)	N.A.	259.72	764.02	989.93	1,299.70	1,660.85	1,222.65	1,487.52
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	2,602	1,775	2,443	2,654	2,889	3,044	2,806	2,930
Real Term (2000 Price and 2000 PPP)	10,016	6,833	9,403	10,216	11,120	11,716	10,801	11,278
Nominal (Current USD)	N.A.	1,775	5,337	6,947	9,146	11,700	8,616	10,494
Nominal GDP & its Components (Billions of Current RUR) *1								
Gross Domestic Product	0.64	7,305.60	21,609.77	26,917.20	33,247.51	41,276.85	38,807.22	45,172.75
Household Final Consumption Expenditure, etc.	0.31	3,374.30	10,792.30	13,129.30	16,217.60	20,183.60	21,196.90	23,328.00
General Government Final Consumption Expenditure	0.13	1,102.50	3,645.90	4,680.40	5,751.00	7,359.90	8,154.30	8,742.20
Gross Fixed Capital Formation	0.18	1,232.00	3,836.90	4,980.60	6,980.40	9,200.80	8,530.70	9,843.70
Stock Change	0.01	133.70	501.80	718.20	1,053.70	1,325.30	-1,190.30	421.30
Exports of Goods and Services	0.12	3,218.90	7,607.30	9,079.30	10,028.80	12,923.60	10,896.80	13,501.90
Imports of Goods and Services	0.12	1,755.80	4,648.30	5,653.40	7,162.20	9,111.00	7,954.30	9,753.70
Real GDP & its Components (Billions of 2000 RUR) *1								
Gross Domestic Product	10,855.15	7,305.60	9,837.35	10,639.43	11,547.51	12,153.52	11,201.64	11,683.31
Household Final Consumption Expenditure, etc.	3,644.80	3,374.30	5,381.22	6,029.51	6,885.00	7,607.65	7,240.48	7,455.27
General Government Final Consumption Expenditure	1,466.92	1,102.50	1,189.60	1,216.96	1,249.82	1,292.31	1,294.90	1,313.03
Gross Fixed Capital Formation	6,142.42	1,232.00	1,979.71	2,336.06	2,826.64	3,126.26	2,676.08	2,839.32
Stock Change	771.03	133.70	200.19	229.69	303.58	332.63	-635.33	-219.00
Exports of Goods and Services	3,926.52	3,218.90	4,959.99	5,322.07	5,657.36	5,691.30	5,423.81	5,808.90
Imports of Goods and Services	4,678.68	1,755.80	4,027.82	4,885.75	6,165.81	7,078.35	4,926.53	6,187.72
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	5.5	5.8	4.9	4.6	4.3	4.4	4.8	4.1
Industry	42.6	33.9	34.4	33.3	32.1	30.9	30.3	31.2
Services, etc.	N.A.	49.7	49.2	50.5	51.8	53.0	54.2	53.2
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.	105.565	243.798	303.551	354.403	471.606	303.388	400.419
Imports, c.i.f.	N.A.	44.659	125.434	164.281	223.486	291.861	191.803	248.738
Balance of Payments (Billions of Current USD) *2								
Trade Balance	N.A.	60.172	118.364	139.269	130.915	179.742	111.585	151.681
Current Account	N.A.	46.839	84.602	94.686	77.768	103.530	48.605	70.255
Overall Balance	N.A.	13.923	64.968	107.466	148.928	-38.919	3.363	36.749
Foreign Exchange Rate (RUR/USD) *1	N.A.	28.1292	28.2844	27.1910	25.5808	24.8529	31.7404	30.3679
Purchasing Power Parity (RUR/International Dollar) *1	0.0005	7.3081	12.7361	12.6352	13.9743	14.3412	14.4759	15.9616
Price Indices								
GDP Deflator (2000=100) *3	0.0	100.0	219.7	253.0	287.9	339.6	346.4	386.6
Producer Price Index (2005=100) *3	N.A.	44.3	100.0	112.4	128.2	155.7	144.5	162.2
Consumer Price Index (2005=100) *3	N.A.	50.1	100.0	109.7	119.6	136.4	152.3	162.8
Growth Rate (%)								
Real GDP (*3)	-3.00	10.00	6.38	8.15	8.54	5.25	-7.83	4.30
Population (*3)	0.39	0.00	-0.49	-0.45	-0.28	-0.11	-0.03	-0.11
Price (*2)								
Producer Price Index	N.A.	46.5	20.6	12.4	14.1	21.4	-7.2	12.2
Consumer Price Index	N.A.	20.8	12.7	9.7	9.0	14.1	11.7	6.9

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"

: RUR means Russian Ruble, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.17 Singapore

## Energy Balance Table of Singapore

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	-	-	-	-	-	-	-	-	-
Import	-	-	41,211	96,649	14,664	5,850	3,386	303	16,825
Export	-	-	-39	-77,323	-17,283	-1,141	-7,548	-1,077	-26,382
International Marine Bunkers	-	-	-	-36,387	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	-	-	-	-	-	-	-	-	-
<b>Total Primary Energy Supply</b>	-	-	<b>41,172</b>	<b>-17,062</b>	<b>-2,619</b>	<b>4,709</b>	<b>-4,161</b>	<b>-774</b>	<b>-9,557</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	-	-	<b>-41,172</b>	<b>39,372</b>	<b>4,084</b>	<b>9,360</b>	<b>4,554</b>	<b>895</b>	<b>10,124</b>
Main Activity Producer	-	-	-	-1,994	-	-	-	-	-38
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-128	-	-128	-	-	-
Petroleum Refineries	-	-	-41,172	41,494	4,084	9,488	4,554	895	10,162
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-980	-	-	-	-	-
Discrepancy	-	-	-0	-5,014	0	-4,709	4,161	-0	-0
<b>Total Final Energy Consumption</b>	-	-	-	<b>16,316</b>	<b>1,465</b>	<b>9,360</b>	<b>4,554</b>	<b>121</b>	<b>567</b>
<b>Industry Sector</b>	-	-	-	<b>9,481</b>	-	<b>9,360</b>	-	<b>121</b>	-
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	-	-	-	9,481	-	9,360	-	121	-
<b>Transport Sector</b>	-	-	-	<b>6,586</b>	<b>1,465</b>	-	<b>4,554</b>	-	<b>567</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	6,586	1,465	-	4,554	-	567
<b>Other Sector</b>	-	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-	-
Commerce and Public Services	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	-	-	-	<b>250</b>	-	-	-	-	-
<b>2009</b>									
Indigenous Production	-	-	-	-	-	-	-	-	-
Import	-	-	44,136	86,266	11,638	4,510	2,942	303	14,582
Export	-	-	-45	-73,550	-14,948	-1,764	-7,353	-1,077	-23,926
International Marine Bunkers	-	-	-	-36,387	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	-	-	-	-	-	-	-	-	-
<b>Total Primary Energy Supply</b>	-	-	<b>44,091</b>	<b>-23,670</b>	<b>-3,311</b>	<b>2,746</b>	<b>-4,411</b>	<b>-774</b>	<b>-9,344</b>
Transfers	-	-	-	-	-	-	-	-	-
<b>Total Transformation Sector</b>	-	-	<b>-44,091</b>	<b>37,113</b>	<b>4,577</b>	<b>4,092</b>	<b>8,157</b>	<b>880</b>	<b>9,910</b>
Main Activity Producer	-	-	-	-1,499	-	-	-	-	-53
Autoproducers	-	-	-	-	-	-	-	-	-
Gas Processing	-	-	-	-128	-	-128	-	-	-
Petroleum Refineries	-	-	-44,091	38,740	4,577	4,220	8,157	880	9,964
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-672	-	-	-	-	-
Discrepancy	-	-	-	0	0	-	-0	-0	0
<b>Total Final Energy Consumption</b>	-	-	-	<b>12,771</b>	<b>1,266</b>	<b>6,837</b>	<b>3,746</b>	<b>105</b>	<b>566</b>
<b>Industry Sector</b>	-	-	-	<b>6,943</b>	-	<b>6,837</b>	-	<b>105</b>	-
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	-	-	-	6,943	-	6,837	-	105	-
<b>Transport Sector</b>	-	-	-	<b>5,578</b>	<b>1,266</b>	-	<b>3,746</b>	-	<b>566</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	5,578	1,266	-	3,746	-	566
<b>Other Sector</b>	-	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-	-
Commerce and Public Services	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	-	-	-	<b>250</b>	-	-	-	-	-

Note: Above Energy Balances Tables were estimated by C.A.

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	-	-	-	-	86	-	-	86
54,684	2	-	-	933	6,573	-	-	-	-	-	-	144,433
-20,549	-328	-	-	-3,015	-	-	-	-	-	-	-	-77,362
-36,387	-	-	-	-	-	-	-	-	-	-	-	-36,387
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-2,251	-326	-	-	-2,082	6,573	-	-	-	86	-	-	30,769
-	-	-	-	-	-	-	-	-	-	-	-	-
6,717	326	980	-	2,332	-6,460	-	-	-	-86	3,902	-	-4,443
-1,956	-	-	-	-	-6,573	-	-	-	-86	3,902	-	-4,751
-	-	-	-	-	113	-	-	-	-	-	-	-15
8,674	326	980	-	2,332	-	-	-	-	-	-	-	322
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-980	-	-	-	-	-	-	-	-358	-	-1,338
-4,466	0	-	-	0	6	-	-	-	-	-36	-	-5,045
-	-	-	-	250	119	-	-	-	-	3,507	-	19,942
-	-	-	-	-	70	-	-	-	-	1,436	-	10,986
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	70	-	-	-	-	1,436	-	10,986
-	-	-	-	-	-	-	-	-	-	-	-	6,586
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	6,586
-	-	-	-	-	49	-	-	-	-	2,071	-	2,120
-	-	-	-	-	49	-	-	-	-	2,067	-	2,115
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	4	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	250	-	-	-	-	-	-	-	250
-	-	-	-	-	-	-	-	-	121	-	-	121
51,637	3	-	-	652	6,233	-	-	-	-	-	-	136,636
-21,008	-592	-	-	-2,880	-	-	-	-	-	-	-	-73,595
-36,387	-	-	-	-	-	-	-	-	-	-	-	-36,387
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-5,758	-590	-	-	-2,228	6,233	-	-	-	121	-	-	26,775
-	-	-	-	-	-	-	-	-	-	-	-	-
5,758	590	672	-	2,478	-6,120	-	-	-	-121	3,595	-	-9,625
-1,446	-	-	-	-	-6,233	-	-	-	-121	3,595	-	-4,259
-	-	-	-	-	113	-	-	-	-	-	-	-15
7,204	590	672	-	2,478	-	-	-	-	-	-	-	-5,351
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-672	-	-	-	-	-	-	-	-329	-	-1,001
-0	-	-	-	0	-0	-	-	-	-	-36	-	-36
-	-	-	-	250	113	-	-	-	-	3,230	-	16,114
-	-	-	-	-	48	-	-	-	-	1,172	-	8,163
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	48	-	-	-	-	1,172	-	8,163
-	-	-	-	-	-	-	-	-	-	-	-	5,578
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	5,578
-	-	-	-	-	65	-	-	-	-	2,058	-	2,123
-	-	-	-	-	65	-	-	-	-	2,053	-	2,118
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	4	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	250	-	-	-	-	-	-	-	250



## Major Energy Indicators of Singapore

ktoe

	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	9,896	20,421	22,991	23,845	23,701	24,788	26,775	30,769
Indigenous Production	19	101	194	295	104	136	121	86
Import	59,503	79,752	106,612	112,813	117,685	129,198	136,636	144,433
Export	-36,556	-39,565	-55,719	-58,260	-62,542	-69,610	-73,595	-77,362
Final Energy Consumption	5,322	9,367	14,744	15,251	15,824	16,129	16,114	19,942
Industry	1,907	3,514	8,058	8,100	8,251	8,423	8,163	10,986
Transport	2,368	4,159	4,726	5,075	5,417	5,494	5,578	6,586
Residential	-	-	1,707	1,823	1,902	1,959	2,118	2,115
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	1,047	1,693	253	253	254	254	254	254
<b>Coal, Coal Products</b>								
Primary Energy Supply	-	0	1	5	-	-	-	-
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	0	1	5	-	-	-	-
Export	-	-0	-	-	-	-	-	-
Transformation Sector	-	-	-1	-5	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-
Final Energy Consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	41,286	41,585	54,738	52,745	51,152	50,201	44,091	41,172
Indigenous Production	-	-	-	-	-	-	-	-
Import	41,286	41,585	54,738	52,745	51,246	50,271	44,136	41,211
Export	-0	-	-	-	-94	-70	-45	-39
Transformation Sector	-	-	-54,738	-52,745	-51,152	-50,201	-44,091	-41,172
Petroleum Refineries	-43,571	-41,585	-54,738	-52,745	-51,152	-50,201	-44,091	-41,172
<b>Petroleum Products</b>								
Primary Energy Supply	-31,409	-22,207	-37,176	-34,848	-33,515	-31,717	-23,670	-17,062
Import	18,217	37,225	46,639	54,414	60,479	72,760	86,266	96,649
Export	-36,555	-39,565	-55,719	-58,260	-62,448	-69,540	-73,550	-77,323
Transformation Sector	-	-	49,632	47,668	46,760	45,221	37,113	39,372
Power Generation	-3,388	-5,563	-1,724	-1,212	-1,734	-1,522	-1,499	-1,994
Petroleum Refineries	39,530	38,305	51,484	49,008	48,622	46,871	38,740	41,494
Final Energy Consumption	4,046	6,757	11,688	12,084	12,527	12,787	12,771	16,316
Industry	1,296	2,372	6,713	6,760	6,861	7,043	6,943	9,481
Transport	2,352	4,135	4,726	5,075	5,417	5,494	5,578	6,586
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	399	250	250	250	250	250	250	250
<b>Natural Gas</b>								
Primary Energy Supply	-	942	5,234	5,649	5,960	6,167	6,233	6,573
Indigenous Production	-	-	-	-	-	-	-	-
Import	-	942	5,234	5,649	5,960	6,167	6,233	6,573
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-5,138	-5,541	-5,849	-6,055	-6,120	-6,460
Power Generation	-	-942	-5,234	-5,649	-5,960	-6,167	-6,233	-6,573
Final Energy Consumption	55	105	96	108	110	113	113	119
Industry	32	66	55	46	47	48	48	70
Transport	-	-	-	-	-	-	-	-
Residential	-	-	41	62	63	64	65	49
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	23	39	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	1,343	2,723	3,286	3,392	3,538	3,588	3,595	3,902
Thermal	1,324	2,622	3,092	3,097	3,433	3,451	3,474	3,816
Hydro	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-
Others	19	101	194	295	104	136	121	86
Final Energy Consumption	1,221	2,505	2,960	3,058	3,186	3,230	3,230	3,507
Industry	580	1,077	1,290	1,294	1,343	1,332	1,172	1,436
Transport	16	25	-	-	-	-	-	-
Residential	-	-	1,666	1,761	1,839	1,894	2,053	2,067
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	625	1,404	4	4	4	4	4	4

## Major Economic Indicators of Singapore

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	3.05	4.03	4.27	4.40	4.59	4.84	4.99	5.08
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	47.30	94.31	119.06	129.50	140.97	143.36	141.96	162.92
Real Term (Billions of 2000 Price and 2000 PPP)	68.21	136.01	171.71	186.76	203.30	206.76	204.73	234.96
Nominal (Billions of Current USD)	38.84	94.31	125.43	145.75	177.58	177.67	171.13	227.38
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	15,522	23,414	27,911	29,422	30,721	29,625	28,463	32,089
Real Term (2000 Price and 2000 PPP)	22,386	33,767	40,253	42,432	44,306	42,724	41,049	46,279
Nominal (Current USD)	12,745	23,414	29,403	33,114	38,700	36,713	34,311	44,787
Nominal GDP & its Components (Billions of Current SGD) *1								
Gross Domestic Product	70.39	162.58	208.76	231.58	267.63	251.37	248.91	310.04
Household Final Consumption Expenditure, etc.	31.93	68.20	83.78	89.79	99.73	97.04	97.17	119.02
General Government Final Consumption Expenditure	6.71	17.70	21.90	23.87	25.54	25.11	26.01	32.63
Gross Fixed Capital Formation	21.90	49.23	44.12	50.23	61.36	66.53	64.60	74.98
Stock Change	2.77	4.72	-2.42	-1.25	-1.66	6.15	-6.55	-6.38
Exports of Goods and Services	124.91	312.71	479.48	540.52	582.63	606.82	559.53	642.30
Imports of Goods and Services	117.82	291.82	418.10	472.38	500.46	550.68	489.79	554.19
Real GDP & its Components (Billions of 1995 SGD) *1								
Gross Domestic Product	82.93	165.36	208.76	227.06	247.17	251.37	248.91	285.66
Household Final Consumption Expenditure, etc.	36.23	67.60	83.78	87.99	93.97	97.04	97.17	103.45
General Government Final Consumption Expenditure	7.38	18.20	21.90	23.01	23.59	25.11	26.01	28.88
Gross Fixed Capital Formation	20.78	48.20	44.12	50.13	58.87	66.53	64.60	69.10
Stock Change	6.14	5.36	-2.42	-1.15	-1.83	6.15	-6.55	-7.67
Exports of Goods and Services	107.14	302.43	479.48	531.75	579.52	606.82	559.53	666.35
Imports of Goods and Services	97.60	280.28	418.10	465.34	502.88	550.68	489.79	568.91
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Industry	31.1	32.9	30.2	30.7	30.1	29.2	29.1	31.6
Services, etc.	62.5	61.9	65.2	64.8	64.9	66.7	66.7	64.3
Manufacturing Production Index (2005=100) *2	38.8	81.4	100.0	111.9	118.4	113.5	108.7	141.1
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	52.730	137.804	229.649	271.807	299.308	338.176	269.832	351.867
Imports, c.i.f.	60.774	134.545	200.047	238.710	263.155	319.780	245.785	310.791
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-1.633	13.678	36.387	42.188	46.676	28.035	29.378	46.758
Current Account	3.122	10.244	26.429	36.099	48.384	27.887	35.207	49.558
Overall Balance	5.431	6.822	12.315	17.008	19.640	13.067	11.808	42.297
Foreign Exchange Rate (SGD/USD) *1	1.8125	1.7240	1.6644	1.5889	1.5071	1.4149	1.4545	1.3635
Purchasing Power Parity (SGD/International Dollar) *1	1.2676	1.1954	1.0786	1.0657	1.0995	0.9934	0.9830	1.0547
Price Indices								
GDP Deflator (2005=100) *3	84.9	98.3	100.0	102.0	108.3	100.0	100.0	108.5
Wholesale Price Index (2005=100) *2	93.1	87.7	100.0	105.0	105.3	113.2	97.5	102.1
Consumer Price Index (2005=100) *2	81.7	96.9	100.0	101.0	103.1	109.9	110.5	113.6
Growth Rate (%) *3								
Real GDP	10.11	9.04	7.37	8.76	8.86	1.70	-0.98	14.76
Population	3.96	1.75	2.38	3.18	4.25	5.47	3.06	1.79
Price								
Wholesale Price Index	1.7	10.1	9.7	5.0	0.3	7.5	-13.9	4.7
Consumer Price Index	3.5	1.4	0.4	1.0	2.1	6.5	0.6	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"

: SGD means Singapore Dollar, USD means United States Dollar

: PPP means Purchasing Power Parity



## 3.18 Chinese Taipei

## Energy Balance Table of Chinese Taipei

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	-	-	13	-	-	-	-	-	-
Import	38,977	129	46,059	18,569	-	13,016	-	-	-
Export	-	-78	-	-15,763	-3,859	-	-1,542	-	-8,638
International Marine Bunkers	-	-	-	-1,780	-	-	-	-	-149
International Aviation Bunkers	-	-	-	-1,979	-	-	-1,979	-	-
Stock Changes	158	-	-157	-82	-69	-138	-	0	114
<b>Total Primary Energy Supply</b>	<b>39,134</b>	<b>51</b>	<b>45,915</b>	<b>-1,035</b>	<b>-3,928</b>	<b>12,878</b>	<b>-3,521</b>	<b>0</b>	<b>-8,673</b>
Transfers	-	-	-	-1,077	-77	1,130	-83	-3	-78
<b>Total Transformation Sector</b>	<b>-33,582</b>	<b>2,523</b>	<b>-46,059</b>	<b>44,012</b>	<b>11,599</b>	<b>3,739</b>	<b>3,826</b>	<b>-</b>	<b>13,263</b>
Main Activity Producer	-22,047	-	-	-1,969	-	-	-	-	-57
Autoproducers	-6,011	-642	-	-1,021	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-46,059	47,002	11,599	3,739	3,826	-	13,320
Coal Transformation	-5,524	3,165	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-962	-	-1,804	-2	-	-0	-0	-29
Discrepancy	-293	44	144	75	36	0	-5	9	96
<b>Total Final Energy Consumption</b>	<b>5,259</b>	<b>1,656</b>	<b>-</b>	<b>40,170</b>	<b>7,628</b>	<b>17,747</b>	<b>217</b>	<b>7</b>	<b>4,580</b>
<b>Industry Sector</b>	<b>5,259</b>	<b>1,656</b>	<b>-</b>	<b>3,869</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>129</b>
Iron and Steel	51	1,360	-	420	0	-	-	-	6
Chemical & Petrochemical	3,475	204	-	1,534	0	-	-	-	70
Non-metallic Minerals	1,336	-	-	354	0	-	-	-	18
Other Industries	398	92	-	1,561	6	-	-	0	34
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11,754</b>	<b>7,583</b>	<b>-</b>	<b>77</b>	<b>-</b>	<b>3,828</b>
Domestic Air Transport	-	-	-	77	-	-	77	-	-
Road	-	-	-	11,379	7,583	-	-	-	3,708
Rail	-	-	-	27	-	-	-	-	27
Inland Waterways	-	-	-	271	-	-	-	-	94
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,526</b>	<b>38</b>	<b>-</b>	<b>140</b>	<b>7</b>	<b>623</b>
Residential	-	-	-	1,186	-	-	-	-	-
Commerce and Public Services	-	-	-	1,035	38	-	140	7	339
Agriculture	-	-	-	4	0	-	-	0	0
Non-specified Others	-	-	-	301	-	-	-	-	283
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22,021</b>	<b>-</b>	<b>17,747</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	-	-	14	-	-	-	-	-	-
Import	36,018	73	49,643	15,059	-	10,914	-	-	-
Export	-	-25	-	-18,708	-4,346	-118	-2,588	-	-10,072
International Marine Bunkers	-	-	-	-1,648	-	-	-	-	-189
International Aviation Bunkers	-	-	-	-1,754	-	-	-1,754	-	-
Stock Changes	850	-	351	-92	-56	187	-	1	-272
<b>Total Primary Energy Supply</b>	<b>36,868</b>	<b>48</b>	<b>50,008</b>	<b>-7,143</b>	<b>-4,402</b>	<b>10,982</b>	<b>-4,342</b>	<b>1</b>	<b>-10,532</b>
Transfers	-	-	-	-808	-94	1,327	-11	-0	-258
<b>Total Transformation Sector</b>	<b>-32,420</b>	<b>1,819</b>	<b>-50,159</b>	<b>47,657</b>	<b>11,971</b>	<b>4,200</b>	<b>4,499</b>	<b>-</b>	<b>15,050</b>
Main Activity Producer	-22,158	-	-	-1,468	-	-	-	-	-57
Autoproducers	-6,278	-381	-	-995	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-50,159	50,121	11,971	4,200	4,499	-	15,107
Coal Transformation	-3,984	2,200	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-697	-	-1,877	-2	-	-	-0	-28
Discrepancy	218	90	151	959	92	83	98	8	118
<b>Total Final Energy Consumption</b>	<b>4,667</b>	<b>1,259</b>	<b>-</b>	<b>38,789</b>	<b>7,565</b>	<b>16,593</b>	<b>243</b>	<b>9</b>	<b>4,350</b>
<b>Industry Sector</b>	<b>4,667</b>	<b>1,259</b>	<b>-</b>	<b>3,798</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>133</b>
Iron and Steel	31	1,114	-	380	0	-	-	-	5
Chemical & Petrochemical	3,028	90	-	1,541	0	-	-	-	69
Non-metallic Minerals	1,259	-	-	327	0	-	-	-	17
Other Industries	350	55	-	1,551	6	-	-	0	42
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11,385</b>	<b>7,519</b>	<b>-</b>	<b>76</b>	<b>-</b>	<b>3,542</b>
Domestic Air Transport	-	-	-	76	-	-	76	-	-
Road	-	-	-	11,037	7,519	-	-	-	3,432
Rail	-	-	-	24	-	-	-	-	24
Inland Waterways	-	-	-	248	-	-	-	-	86
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,652</b>	<b>40</b>	<b>-</b>	<b>167</b>	<b>9</b>	<b>676</b>
Residential	-	-	-	1,225	-	-	-	-	-
Commerce and Public Services	-	-	-	1,104	40	-	167	9	373
Agriculture	-	-	-	4	0	-	-	0	0
Non-specified Others	-	-	-	319	-	-	-	-	302
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20,954</b>	<b>-</b>	<b>16,593</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	237	626	10,848	193	1,708	-	-	13,625
2,301	1,082	-	-	2,171	13,866	-	-	-	-	-	-	117,600
-729	-111	-	-	-883	-	-	-	-	-	-	-	-15,841
-1,630	-	-	-	-2	-	-	-	-	-	-	-	-1,780
-	-	-	-	-	-	-	-	-	-	-	-	-1,979
-12	22	-	-	-	-20	-	-	-	-	-	-	-101
-70	992	-	-	1,286	14,082	626	10,848	193	1,708	-	-	111,523
-1,770	-16	-	-	-180	-	-	-	-	-	-	-	-1,077
6,320	1,609	1,349	-	2,307	-11,539	-624	-10,848	-89	-1,708	21,245	-	-36,670
-1,912	-	-	-	-	-10,361	-624	-10,848	-87	-	17,965	-	-27,971
-544	-	-18	-	-459	-111	-	-	-2	-1,708	3,280	-	-6,216
-	-	-	-	-	-1,067	-	-	-	-	-	-	-1,067
8,777	1,609	1,367	-	2,766	-	-	-	-	-	-	-	943
-	-	-	-	-	-	-	-	-	-	-	-	-2,359
-	-	-	-	-	-	-	-	-	-	-	-	-
-373	-51	-1,349	-	-	-545	-3	-	-0	-	-1,821	-	-5,135
-219	-5	0	-	162	126	1	-	-1	-	-646	-	-551
3,889	2,528	-	-	3,574	2,124	-	-	103	-	18,777	-	68,090
3,263	458	-	-	13	1,014	-	-	-	-	10,677	-	22,476
390	11	-	-	13	209	-	-	-	-	1,281	-	3,321
1,164	300	-	-	-	268	-	-	-	-	3,279	-	8,761
323	13	-	-	-	150	-	-	-	-	438	-	2,278
1,386	134	-	-	-	386	-	-	-	-	5,679	-	8,117
177	88	-	-	-	-	-	-	-	-	100	-	11,854
-	-	-	-	-	-	-	-	-	-	-	-	77
-	88	-	-	-	-	-	-	-	-	-	-	11,379
-	-	-	-	-	-	-	-	-	-	100	-	127
177	-	-	-	-	-	-	-	-	-	-	-	271
-	-	-	-	-	-	-	-	-	-	-	-	-
449	1,270	-	-	-	1,110	-	-	103	-	8,000	-	11,739
-	1,186	-	-	-	695	-	-	103	-	3,735	-	5,719
428	84	-	-	-	415	-	-	-	-	4,040	-	5,490
3	0	-	-	-	-	-	-	-	-	148	-	152
17	-	-	-	-	-	-	-	-	-	77	-	378
-	712	-	-	3,562	-	-	-	-	-	-	-	22,021
-	-	-	-	-	281	693	10,833	145	1,835	-	-	13,801
851	1,405	-	-	1,890	11,062	-	-	-	-	-	-	111,855
-569	-178	-	-	-836	-	-	-	-	-	-	-	-18,733
-1,458	-	-	-	-1	-	-	-	-	-	-	-	-1,648
-	-	-	-	-	-	-	-	-	-	-	-	-1,754
143	-96	-	-	-	-63	-	-	-	-	-	-	1,046
-1,034	1,130	-	-	1,053	11,280	693	10,833	145	1,835	-	-	104,568
-1,462	-54	-	-	-257	-	-	-	-	-	-	-	-808
6,446	1,764	1,277	-	2,451	-9,523	-607	-10,833	-67	-1,835	19,753	-	-36,214
-1,411	-	-	-	-	-7,985	-607	-10,833	-67	-	16,550	-	-26,568
-531	-	-22	-	-442	-115	-	-	-	-1,835	3,203	-	-6,401
-	-	-	-	-	-1,423	-	-	-	-	-	-	-1,423
8,389	1,764	1,299	-	2,893	-	-	-	-	-	-	-	-39
-	-	-	-	-	-	-	-	-	-	-	-	-1,784
-	-	-	-	-	-	-	-	-	-	-	-	-
-528	-43	-1,277	-	-	-404	-2	-	-0	-	-1,772	-	-4,752
331	-7	-	-	237	479	-84	-	24	-	-640	-	1,197
3,754	2,791	-	-	3,483	1,833	-	-	102	-	17,341	-	63,990
3,146	434	-	-	79	820	-	-	-	-	9,434	-	19,978
350	13	-	-	12	164	-	-	-	-	1,001	-	2,690
1,137	269	-	-	67	204	-	-	-	-	3,004	-	7,867
296	14	-	-	-	132	-	-	-	-	390	-	2,107
1,364	139	-	-	-	320	-	-	-	-	5,038	-	7,314
162	85	-	-	-	-	-	-	-	-	95	-	11,480
-	-	-	-	-	-	-	-	-	-	-	-	76
-	85	-	-	-	-	-	-	-	-	-	-	11,037
-	-	-	-	-	-	-	-	-	-	95	-	119
162	-	-	-	-	-	-	-	-	-	-	-	248
-	-	-	-	-	-	-	-	-	-	-	-	-
446	1,315	-	-	-	1,013	-	-	102	-	7,812	-	11,578
-	1,225	-	-	-	655	-	-	102	-	3,704	-	5,686
426	89	-	-	-	358	-	-	-	-	3,886	-	5,348
3	0	-	-	-	-	-	-	-	-	143	-	147
17	-	-	-	-	-	-	-	-	-	79	-	398
-	957	-	-	3,405	-	-	-	-	-	-	-	20,954

## Major Energy Indicators of Chinese Taipei

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	45,477	78,981	104,593	107,963	112,426	107,218	104,568	111,523
Indigenous Production	10,748	11,476	13,152	13,389	14,249	13,727	13,801	13,625
Import	39,723	78,713	111,997	115,142	119,902	115,530	111,855	117,600
Export	-335	-2,294	-15,590	-14,937	-17,787	-17,452	-18,733	-15,841
Final Energy Consumption	29,302	53,558	62,206	63,321	67,848	64,332	63,990	68,090
Industry	15,667	29,393	23,798	24,802	22,903	21,209	19,978	22,476
Transport	6,735	12,165	12,657	12,640	12,148	11,521	11,480	11,854
Residential	2,904	4,802	6,140	6,232	5,906	5,837	5,686	5,719
Commerce & Public Services	2,259	3,999	4,882	4,860	5,444	5,451	5,348	5,490
Others	1,736	3,199	14,730	14,787	21,446	20,315	21,499	22,550
<b>Coal, Coal Products</b>								
Primary Energy Supply	10,562	27,493	39,183	41,069	40,293	38,729	36,916	39,186
Indigenous Production	278	49	-	-	-	-	-	-
Import	11,389	27,911	39,715	41,097	40,457	39,513	36,090	39,106
Export	-0	-	-	-	-7	-59	-25	-78
Transformation Sector	-	-	-30,217	-31,428	-31,870	-31,132	-30,601	-31,059
Power Generation	-5,145	-19,428	-28,585	-29,650	-30,690	-29,649	-28,817	-28,700
Final Energy Consumption	5,903	8,391	6,706	7,254	6,589	6,240	5,926	6,915
Industry	5,897	8,339	6,706	7,254	6,589	6,240	5,926	6,915
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	6	52	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	20,512	36,188	54,303	51,927	52,202	47,241	50,008	45,915
Indigenous Production	156	32	29	21	16	14	14	13
Import	21,105	36,876	54,576	52,199	51,955	47,865	49,643	46,059
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-54,431	-52,244	-52,049	-47,351	-50,159	-46,059
Petroleum Refineries	-20,512	-36,188	-54,431	-52,244	-52,049	-47,351	-50,159	-46,059
<b>Petroleum Products</b>								
Primary Energy Supply	3,406	-1,093	-12,004	-8,947	-5,906	-4,846	-7,143	-1,035
Import	6,467	8,757	7,864	11,173	16,007	15,679	15,059	18,569
Export	-335	-2,294	-15,590	-14,937	-17,779	-17,393	-18,708	-15,763
Transformation Sector	-	-	50,566	48,932	49,644	51,042	47,657	44,012
Power Generation	-4,825	-6,171	-3,882	-4,559	-3,954	-3,609	-2,463	-2,990
Petroleum Refineries	19,184	39,502	54,448	53,491	53,598	54,651	50,121	47,002
Final Energy Consumption	16,106	29,907	36,692	36,669	40,824	37,889	38,789	40,170
Industry	5,803	12,868	7,319	7,321	5,120	4,030	3,798	3,869
Transport	6,698	12,071	12,542	12,552	12,076	11,427	11,385	11,754
Residential	1,094	1,266	1,304	1,256	1,256	1,236	1,225	1,186
Commerce & Public Services	973	830	1,012	978	1,150	1,105	1,104	1,035
Others	1,538	2,872	14,516	14,563	21,221	20,091	21,276	22,325
<b>Natural Gas</b>								
Primary Energy Supply	1,728	5,596	10,476	10,957	11,886	12,700	11,280	14,082
Indigenous Production	1,045	598	487	412	371	318	281	237
Import	762	5,169	9,842	10,673	11,393	12,473	11,062	13,866
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-8,113	-8,489	-9,317	-10,200	-9,523	-11,539
Power Generation	-241	-3,393	-7,518	-7,738	-8,575	-9,434	-8,100	-10,472
Final Energy Consumption	926	1,490	1,986	2,010	2,051	2,036	1,833	2,124
Industry	392	682	862	900	929	871	820	1,014
Transport	-	-	-	-	-	-	-	-
Residential	400	565	844	828	847	831	655	695
Commerce & Public Services	81	162	280	282	275	334	358	415
Others	53	81	-	-	-0	-	-	-
<b>Electricity</b>								
Power Generation	7,481	15,897	19,561	20,242	20,908	20,541	19,753	21,245
Thermal	3,922	11,790	13,957	14,305	14,184	14,342	13,634	15,208
Hydro	704	763	680	685	718	687	607	624
Nuclear	2,855	3,345	3,472	3,463	3,522	3,546	3,611	3,616
Others	-	-	1,451	1,788	2,484	1,965	1,902	1,797
Final Energy Consumption	6,367	13,770	16,734	17,296	18,289	18,069	17,341	18,777
Industry	3,575	7,504	8,911	9,327	10,265	10,068	9,434	10,677
Transport	37	94	115	88	71	95	95	100
Residential	1,410	2,971	3,905	4,055	3,709	3,671	3,704	3,735
Commerce & Public Services	1,206	3,008	3,589	3,601	4,019	4,012	3,886	4,040
Others	139	195	214	224	225	224	222	225

## Major Economic Indicators of Chinese Taipei

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	20.40	22.28	22.77	22.88	22.96	23.04	23.12	23.16
Gross Domestic Product *2								
Real Term (Billions of 2000 Price and 2000 USD)	168.70	308.78	368.47	388.50	411.74	414.75	407.24	450.91
Real Term (Billions of 2000 Price and 2000 PPP)	258.05	472.32	563.61	594.25	629.80	634.40	622.92	689.71
Nominal (Billions of Current USD)	163.41	308.78	357.39	375.61	397.94	384.06	389.67	448.31
GDP per Capita *2								
Real Term (2000 Price and 2000 USD)	8,269	13,861	16,182	16,983	17,934	18,004	17,614	19,468
Real Term (2000 Price and 2000 PPP)	12,649	21,202	24,752	25,976	27,432	27,538	26,943	29,778
Nominal (Current USD)	8,010	13,861	15,695	16,419	17,333	16,671	16,854	19,355
Nominal GDP & its Components (Billions of Current TWD) *1								
Gross Domestic Product	4,430.06	10,187.39	11,740.28	12,243.47	12,910.51	12,620.15	12,481.09	13,614.22
Private Consumption, etc.	2,388.85	5,987.73	7,090.74	7,248.34	7,506.47	7,610.00	7,573.58	7,902.46
General Government Consumption	769.31	1,362.91	1,463.23	1,469.30	1,521.10	1,563.63	1,620.00	1,644.56
Fixed Investment	1,048.75	2,524.44	2,635.45	2,730.67	2,841.35	2,665.93	2,353.58	2,960.21
Stock Change	30.68	91.20	32.40	46.28	14.46	160.38	-145.18	144.38
Exports of Goods & NF Services	2,025.42	5,392.44	7,341.71	8,325.72	9,304.06	9,208.65	7,799.17	10,010.10
Imports of Goods & NF Services	1,832.95	5,171.33	6,823.25	7,576.84	8,276.93	8,588.44	6,720.05	9,047.50
Real GDP & its Components (Billions of 2001 TWD) *1								
Gross Domestic Product	5,316.58	9,731.21	11,612.09	12,243.47	12,975.99	13,070.68	12,834.05	14,210.29
Private Consumption, etc.	3,150.89	6,149.54	7,141.82	7,248.34	7,399.43	7,330.49	7,386.06	7,657.43
General Government Consumption	1,080.76	1,437.46	1,479.82	1,469.30	1,499.97	1,512.36	1,573.01	1,582.21
Fixed Investment	1,371.51	2,812.74	2,728.70	2,730.67	2,745.80	2,406.52	2,135.82	2,648.21
Stock Change	39.53	107.49	34.22	46.28	12.87	134.44	-133.95	144.63
Exports of Goods & NF Services	2,221.05	5,355.03	7,473.09	8,325.72	9,120.88	9,200.04	8,401.71	10,549.34
Imports of Goods & NF Services	2,547.17	6,131.05	7,245.56	7,576.84	7,802.96	7,513.17	6,528.60	8,371.53
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	4.0	2.0	1.7	1.6	1.5	1.6	1.7	1.6
Industry	38.9	30.5	31.3	31.3	31.4	29.1	28.9	31.1
Services, etc.	57.0	67.5	67.1	67.1	67.1	69.3	69.3	67.2
Industrial Production Index (2006=100) *1	46.0	77.3	95.7	100.0	108.3	106.7	98.2	126.2
External Trade (Billions of Current USD) *1								
Exports	67.425	151.950	198.432	224.017	246.677	255.629	203.675	274.601
Imports, c.i.f.	54.786	140.732	182.614	202.698	219.252	240.448	174.371	251.236
Balance of Payments (Billions of Current USD) *1								
Trade Balance	14.807	13.672	12.803	20.686	28.805	20.325	32.544	29.006
Current Account	10.923	8.899	17.578	26.332	35.154	27.505	42.923	39.873
Overall Balance	-3.918	2.477	17.461	26.214	35.058	27.171	42.827	39.757
Foreign Exchange Rate (TWD/USD) *1	27.11	32.99	32.85	32.60	32.44	32.86	32.03	30.37
Purchasing Power Parity (TWD/International Dollar) *3	N.A.	21.5691	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Price Indices								
GDP Deflator (2006=100) *2	83.3	104.7	101.1	100.0	99.5	96.6	97.3	95.8
Wholesale Price Index (2006=100) *2	83.1	86.9	94.7	100.0	106.5	112.0	102.2	107.8
Consumer Price Index (2006=100) *2	74.5	96.1	99.4	100.0	101.8	105.4	104.5	105.5
Growth Rate (%) *2								
Real GDP	6.87	5.80	4.70	5.44	5.98	0.73	-1.81	10.72
Population	1.21	0.83	0.36	0.47	0.36	0.34	0.36	0.18
Price								
Wholesale Price Index	-0.6	1.8	0.6	5.6	6.5	5.2	-8.7	5.5
Consumer Price Index	4.1	1.3	2.3	0.6	1.8	3.5	-0.9	1.0

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

\*2 : Calculated from \*1 by the Coordinating Agency with IEA Energy Statistics

\*3 : PPP in 2000 is estimated by IEA data.

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 2010

## Currency Exchange Rate

Currency Exchange Rate	Local currency / USD	
Local Currency Unit		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	197.40	Coking Coal			Coking Coal		
Anthracite	USD/ton	183.07	Anthracite			Anthracite		
Other bituminous coal	USD/ton	103.79	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal	USD/ton	80.98	Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite			Lignite		
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke	USD/ton	346.76	Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB			BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil	USD/bbl	76.63	Crude Oil			Crude Oil		
Natural Gas Liquids			Natural Gas Liquids			Natural Gas Liquids		
Ethane			Ethane			Ethane		
LPG	USD/ton	16.45	LPG	NTD/kg	28.46	LPG	NTD/kg	28.46
Naphtha	USD/ton	726.94	Naphtha			Naphtha		
Motor Gasoline			Motor Gasoline	NTD/L	29.12	Motor Gasoline	NTD/L	31.77
Aviation Gasoline			Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel			Kerosene Type Jet Fuel			Kerosene Type Jet Fuel		
Other Kerosene			Other Kerosene	NTD/L	39.00	Other Kerosene	NTD/L	39.00
Gas/Diesel Oil			Gas/Diesel Oil	NTD/L	27.22	Gas/Diesel Oil	NTD/L	28.60
Fuel Oil	USD/kL	508.64	Fuel Oil	NTD/L	17.78	Fuel Oil	NTD/L	17.75
White Spirit SBP			White Spirit SBP			White Spirit SBP		
Lubricants			Lubricants			Lubricants		
Bitumen			Bitumen			Bitumen		
Paraffin Waxes			Paraffin Waxes			Paraffin Waxes		
Petroleum Coke			Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas			Natural Gas	NTD/m <sup>3</sup>	14.64	Natural Gas	NTD/m <sup>3</sup>	15.83
Liquefied Natural Gas	USD/ton	509.40	Liquefied Natural Gas	NTD/m <sup>3</sup>	16.29	Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas		
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity			Electricity	NTD/kWh	2.61	Industrial	NTD/kWh	2.46
						Commercial	NTD/kWh	3.10
						Residential	NTD/kWh	2.10
						Others		
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		

## 3.19 Thailand

## Energy Balance Table of Thailand

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	4,586	-	17,128	-	-	-	-	-	-
Import	4,476	6,292	42,757	163	-	-	2	-	54
Export	-1	-13	-1,587	-10,423	-1,011	-	-1,159	-351	-4,800
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-3,628	-	-	-3,628	-	-
Stock Changes	-	-	-	541	-	-	-	-	-
<b>Total Primary Energy Supply</b>	<b>9,062</b>	<b>6,279</b>	<b>58,297</b>	<b>-13,347</b>	<b>-1,011</b>	<b>-</b>	<b>-4,784</b>	<b>-351</b>	<b>-4,746</b>
Transfers	-	-	-6,334	5,099	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-6,820</b>	<b>-</b>	<b>-48,422</b>	<b>39,422</b>	<b>6,574</b>	<b>-</b>	<b>5,112</b>	<b>393</b>	<b>20,250</b>
Main Activity Producer	-6,315	-	-	-258	-	-	-	-	-34
Autoproducers	-505	-	-	-5	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-49,224	39,684	6,574	-	5,112	393	20,284
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	802	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-957	365	1,989	-850	14	-	-68	-29	554
<b>Total Final Energy Consumption</b>	<b>1,285</b>	<b>6,645</b>	<b>5,530</b>	<b>30,323</b>	<b>5,576</b>	<b>-</b>	<b>260</b>	<b>13</b>	<b>16,058</b>
<b>Industry Sector</b>	<b>1,285</b>	<b>6,645</b>	<b>-</b>	<b>2,817</b>	<b>15</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>985</b>
Iron and Steel	109	273	-	304	0	-	-	0	33
Chemical & Petrochemical	13	1,600	-	400	2	-	-	3	78
Non-metallic Minerals	1,056	3,903	-	204	0	-	-	1	52
Other Industries	106	868	-	1,909	12	-	-	4	823
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>19,576</b>	<b>5,513</b>	<b>-</b>	<b>260</b>	<b>-</b>	<b>11,623</b>
Domestic Air Transport	-	-	-	260	-	-	260	-	-
Road	-	-	-	17,777	5,513	-	-	-	11,463
Rail	-	-	-	83	-	-	-	-	83
Inland Waterways	-	-	-	1,456	-	-	-	-	77
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,374</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>3,450</b>
Residential	-	-	-	1,667	-	-	-	4	-
Commerce and Public Services	-	-	-	1,204	-	-	-	-	-
Agriculture	-	-	-	3,504	49	-	-	0	3,450
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>5,530</b>	<b>1,556</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	5,021	-	16,188	-	-	-	-	-	-
Import	4,915	5,354	43,148	431	11	-	9	-	333
Export	-1	-16	-2,261	-10,209	-1,016	-	-1,327	-16	-4,148
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-3,366	-	-	-3,366	-	-
Stock Changes	-2	-827	935	-1,113	-596	-	45	-54	336
<b>Total Primary Energy Supply</b>	<b>9,933</b>	<b>4,511</b>	<b>58,010</b>	<b>-14,256</b>	<b>-1,602</b>	<b>-</b>	<b>-4,639</b>	<b>-70</b>	<b>-3,480</b>
Transfers	-	-	-3,281	3,281	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-7,249</b>	<b>-</b>	<b>-49,252</b>	<b>39,929</b>	<b>6,657</b>	<b>-</b>	<b>4,929</b>	<b>85</b>	<b>19,299</b>
Main Activity Producer	-6,687	-	-	-162	-	-	-	-	-21
Autoproducers	-562	-	-	-146	-	-	-	-	-138
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-49,252	40,238	6,657	-	4,929	85	19,457
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	-8	0	-358	1,793	606	-	-0	904	136
<b>Total Final Energy Consumption</b>	<b>2,676</b>	<b>4,511</b>	<b>5,119</b>	<b>30,747</b>	<b>5,661</b>	<b>-</b>	<b>291</b>	<b>918</b>	<b>15,955</b>
<b>Industry Sector</b>	<b>2,676</b>	<b>4,511</b>	<b>-</b>	<b>3,467</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>574</b>	<b>1,052</b>
Iron and Steel	76	7	-	281	0	-	-	24	32
Chemical & Petrochemical	7	20	-	533	1	-	-	196	76
Non-metallic Minerals	2,008	2,822	-	258	0	-	-	73	51
Other Industries	585	1,662	-	2,394	11	-	-	281	894
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>19,647</b>	<b>5,598</b>	<b>-</b>	<b>291</b>	<b>-</b>	<b>11,494</b>
Domestic Air Transport	-	-	-	293	2	-	291	-	-
Road	-	-	-	17,722	5,596	-	-	-	11,341
Rail	-	-	-	86	-	-	-	-	86
Inland Waterways	-	-	-	1,546	-	-	-	-	67
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,434</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>345</b>	<b>3,409</b>
Residential	-	-	-	2,081	-	-	-	331	-
Commerce and Public Services	-	-	-	876	-	-	-	-	-
Agriculture	-	-	-	3,476	49	-	-	13	3,409
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>5,119</b>	<b>1,199</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	25,000	476	-	4	1,678	-	-	48,872
96	10	-	-	-	11,307	-	-	-	-	627	-	65,621
-3,072	-29	-	-	-	-	-	-	-	-	-139	-	-12,163
-	-	-	-	-	-	-	-	-	-	-	-	-
-	541	-	-	-	-	-	-	-	-	-	-	-3,628
-	-	-	-	-	-	-	-	-	-	-	-	541
-2,976	522	-	-	-	36,307	476	-	4	1,678	488	-	99,243
-	5,099	-	-	-	-	-	-	-	-	-	-	-1,235
5,501	1,593	-	-	-	-24,983	-476	-	-4	-1,678	12,415	-	-30,546
-224	-	-	-	-	-22,510	-476	-	-4	-	12,415	-	-17,148
-5	-	-	-	-	-2,473	-	-	-	-1,678	-	-	-4,660
-	-	-	-	-	-	-	-	-	-	-	-	-
5,729	1,593	-	-	-	-	-	-	-	-	-	-	-9,540
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	802
-	-	-	-	-	-6,271	-	-	-	-	-523	-	-6,794
-239	-1,083	-	-	-	-0	-	-	0	-	433	-	980
2,285	6,132	-	-	-	5,053	-	-	-	-	12,813	-	61,648
903	906	-	-	-	2,191	-	-	-	-	5,444	-	18,381
144	127	-	-	-	249	-	-	-	-	1,836	-	2,771
81	236	-	-	-	820	-	-	-	-	918	-	3,751
26	125	-	-	-	767	-	-	-	-	538	-	6,470
653	418	-	-	-	354	-	-	-	-	2,151	-	5,389
1,379	801	-	-	-	1,612	-	-	-	-	6	-	21,194
-	-	-	-	-	-	-	-	-	-	-	-	260
-	801	-	-	-	1,612	-	-	-	-	-	-	19,389
-	-	-	-	-	-	-	-	-	-	-	-	89
1,379	-	-	-	-	-	-	-	-	-	6	-	1,456
-	-	-	-	-	-	-	-	-	-	-	-	-
3	2,868	-	-	-	1	-	-	-	-	7,363	-	13,738
-	1,663	-	-	-	-	-	-	-	-	2,867	-	4,534
1	1,203	-	-	-	1	-	-	-	-	4,399	-	5,604
2	2	-	-	-	-	-	-	-	-	29	-	3,532
-	-	-	-	-	-	-	-	-	-	68	-	68
-	1,556	-	-	-	1,250	-	-	-	-	-	-	8,336
-	-	-	-	-	23,337	615	-	2	1,971	-	-	47,134
79	-	-	-	-	8,294	-	-	-	-	210	-	62,352
-3,684	-18	-	-	-	-	-	-	-	-	-134	-	-12,622
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-3,366
-345	-498	-	-	-	-	-	-	-	-	-	-	-1,007
-3,950	-516	-	-	-	31,631	615	-	2	1,971	76	-	92,492
-	3,281	-	-	-	-	-	-	-	-	-	-	-
6,424	2,536	-	-	-	-22,751	-615	-	-2	-1,971	12,754	-	-29,157
-142	-	-	-	-	-20,307	-615	-	-2	-	11,477	-	-16,296
-9	-	-	-	-	-2,444	-	-	-	-1,971	1,277	-	-3,846
-	-	-	-	-	-	-	-	-	-	-	-	-
6,574	2,536	-	-	-	-	-	-	-	-	-	-	-9,014
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-4,057	-	-	-	-	-1,250	-	-5,307
147	-0	-	-	-	-0	-	-	-	-	48	-	1,475
2,621	5,301	-	-	-	4,822	-	-	-	-	11,628	-	59,503
1,138	690	-	-	-	2,346	-	-	-	-	4,874	-	17,873
140	85	-	-	-	213	-	-	-	-	488	-	1,064
86	175	-	-	-	1,016	-	-	-	-	820	-	2,396
41	94	-	-	-	714	-	-	-	-	529	-	6,332
870	337	-	-	-	403	-	-	-	-	3,037	-	8,080
1,480	785	-	-	-	1,280	-	-	-	-	5	-	20,932
-	-	-	-	-	-	-	-	-	-	-	-	293
-	785	-	-	-	1,280	-	-	-	-	-	-	19,002
-	-	-	-	-	-	-	-	-	-	5	-	92
1,480	-	-	-	-	-	-	-	-	-	-	-	1,546
-	-	-	-	-	-	-	-	-	-	-	-	-
4	2,627	-	-	-	0	-	-	-	-	6,749	-	13,183
-	1,750	-	-	-	-	-	-	-	-	2,612	-	4,693
1	875	-	-	-	0	-	-	-	-	4,050	-	4,927
3	2	-	-	-	-	-	-	-	-	27	-	3,504
-	-	-	-	-	-	-	-	-	-	60	-	60
-	1,199	-	-	-	1,196	-	-	-	-	-	-	7,515

## Major Energy Indicators of Thailand

ktoe

	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	27,918	60,372	78,337	80,417	83,848	84,895	92,492	99,243
Indigenous Production	11,854	28,559	34,323	33,537	36,063	39,524	47,134	48,872
Import	18,968	40,086	57,234	58,649	59,183	59,879	62,352	65,621
Export	-791	-5,450	-9,024	-10,250	-10,073	-11,646	-12,622	-12,163
Final Energy Consumption	20,196	38,675	52,278	51,864	53,428	55,180	59,503	61,648
Industry	5,917	12,833	17,729	17,728	18,416	18,777	17,873	18,381
Transport	9,452	15,945	20,247	19,535	19,858	19,680	20,932	21,194
Residential	487	5,828	3,513	3,634	3,846	4,405	4,693	4,534
Commerce & Public Services	478	728	3,826	4,191	4,457	4,952	4,927	5,604
Others	3,863	3,341	6,963	6,776	6,852	7,366	11,078	11,936
<b>Coal, Coal Products</b>								
Primary Energy Supply	3,828	7,838	10,680	11,847	14,234	14,953	14,444	15,341
Indigenous Production	3,603	5,196	5,220	4,750	5,204	4,787	5,021	4,586
Import	220	2,655	5,461	7,097	9,030	10,119	10,269	10,768
Export	-	-	-	-	-	47	-17	-13
Transformation Sector	-	-	-4,725	-4,816	-6,948	-7,536	-7,249	-6,820
Power Generation	-2,472	-4,204	-4,725	-4,816	-6,948	-7,536	-7,249	-6,820
Final Energy Consumption	1,357	3,660	6,827	7,569	6,918	7,459	7,187	7,929
Industry	1,356	3,660	6,827	7,569	6,918	7,459	7,187	7,929
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	0	-	-	-	-	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	12,220	39,400	52,006	53,574	54,783	53,555	58,010	58,297
Indigenous Production	2,112	5,159	12,348	12,736	14,069	15,182	16,188	17,128
Import	10,961	34,062	41,693	41,773	40,217	40,893	43,148	42,757
Export	-767	-514	-3,453	-3,349	-2,724	-2,520	-2,261	-1,587
Transformation Sector	-	-	-46,494	-48,094	-48,197	-49,565	-49,252	-48,422
Petroleum Refineries	-11,806	-38,169	-46,494	-48,094	-48,197	-49,565	-49,252	-49,224
<b>Petroleum Products</b>								
Primary Energy Supply	5,678	-7,243	-9,149	-9,388	-10,273	-11,568	-14,256	-13,347
Import	7,731	1,179	1,980	1,382	825	366	431	163
Export	-21	-4,919	-5,516	-6,836	-6,552	-9,071	-10,209	-10,423
Transformation Sector	-	-	34,166	35,493	36,391	38,003	39,929	39,422
Power Generation	-2,548	-2,344	-1,967	-1,946	-908	-387	-308	-263
Petroleum Refineries	11,490	32,193	36,365	37,439	37,299	38,678	40,238	39,684
Final Energy Consumption	15,246	24,420	29,951	28,392	29,255	29,785	30,747	30,323
Industry	2,753	4,335	4,032	3,027	3,981	3,880	3,467	2,817
Transport	9,452	15,939	20,192	19,451	19,645	19,011	19,647	19,576
Residential	487	908	1,310	1,311	1,435	1,930	2,081	1,667
Commerce & Public Services	477	728	570	705	771	810	876	1,204
Others	2,077	2,510	3,848	3,898	3,424	4,155	4,676	5,060
<b>Natural Gas</b>								
Primary Energy Supply	5,710	19,620	22,788	22,097	22,925	25,497	31,631	36,307
Indigenous Production	5,710	17,685	15,068	14,144	14,611	17,236	23,337	25,000
Import	-	1,935	7,720	7,952	8,314	8,261	8,294	11,307
Export	-	-	-	-	-	-	-	-
Transformation Sector	-	-	-21,185	-19,946	-20,428	-22,293	-22,751	-24,983
Power Generation	-4,216	-14,106	-21,185	-19,946	-20,428	-22,293	-22,751	-24,983
Final Energy Consumption	267	1,389	2,067	2,151	2,497	3,204	4,822	5,053
Industry	266	1,386	2,017	2,071	2,296	2,540	2,346	2,191
Transport	-	2	50	80	200	664	1,280	1,612
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	0	1
Others	0	-	-	-	-	-	1,196	1,250
<b>Electricity</b>								
Power Generation	3,799	8,254	11,369	11,932	12,331	12,679	12,754	12,415
Thermal	3,370	7,734	9,684	10,026	10,153	10,360	10,167	10,257
Hydro	428	518	499	699	698	612	615	476
Nuclear	-	-	-	-	-	-	-	-
Others	1	2	1,187	1,207	1,480	1,707	1,972	1,682
Final Energy Consumption	3,297	7,562	10,387	10,951	11,413	11,608	11,628	12,813
Industry	1,542	3,452	4,853	5,061	5,220	4,898	4,874	5,444
Transport	-	3	5	5	12	5	5	6
Residential	0	0	2,203	2,322	2,412	2,476	2,612	2,867
Commerce & Public Services	0	0	3,256	3,486	3,686	4,142	4,050	4,399
Others	1,755	4,107	70	77	83	87	87	97

## Major Economic Indicators of Thailand

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	57.07	63.16	66.70	67.28	67.80	68.27	68.71	69.12
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	79.36	122.73	157.38	165.40	173.74	178.06	173.91	187.49
Real Term (Billions of 2000 Price and 2000 PPP)	199.15	307.97	394.95	415.06	436.00	446.83	436.42	470.51
Nominal (Billions of Current USD)	85.34	122.73	176.35	207.09	246.98	272.58	263.71	318.91
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	1,391	1,943	2,360	2,459	2,563	2,608	2,531	2,713
Real Term (2000 Price and 2000 PPP)	3,489	4,876	5,921	6,170	6,431	6,545	6,352	6,807
Nominal (Current USD)	1,495	1,943	2,644	3,078	3,643	3,993	3,838	4,614
Nominal GDP & its Components (Billions of Current THB) *1								
Gross Domestic Product	2,183.54	4,922.73	7,092.89	7,844.94	8,525.20	9,080.47	9,041.55	10,104.82
Household Final Consumption Expenditure, etc.	1,234.98	2,762.93	4,060.41	4,379.07	4,555.20	4,999.61	4,993.30	5,429.68
General Government Final Consumption Expenditure	205.35	557.81	843.65	925.99	1,039.27	1,120.84	1,213.93	1,310.03
Gross Fixed Capital Formation	881.76	1,081.42	2,049.82	2,203.97	2,249.65	2,492.33	2,181.82	2,499.31
Stock Change	21.21	42.74	180.34	15.94	3.89	152.27	-261.32	121.38
Exports of Goods and Services	745.29	3,287.28	5,218.08	5,777.55	6,259.58	6,941.52	6,180.05	7,199.75
Imports of Goods and Services	909.46	2,862.30	5,297.47	5,503.77	5,544.49	6,708.78	5,226.52	6,455.81
Real GDP & its Components (Billions of 1988 THB) *1								
Gross Domestic Product	1,945.37	3,008.40	3,858.02	4,054.50	4,259.03	4,364.83	4,263.14	4,596.11
Household Final Consumption Expenditure, etc.	1,110.93	1,623.72	2,109.34	2,176.21	2,214.42	2,278.62	2,252.70	2,361.23
General Government Final Consumption Expenditure	171.94	277.13	344.92	352.51	386.90	399.31	429.06	456.38
Gross Fixed Capital Formation	759.87	597.44	902.42	937.28	951.52	962.69	873.73	955.43
Stock Change	20.65	25.64	76.60	6.85	1.91	67.86	-102.58	37.10
Exports of Goods and Services	709.65	1,947.08	2,554.38	2,788.03	3,006.05	3,159.12	2,764.26	3,170.36
Imports of Goods and Services	806.98	1,497.67	2,155.98	2,227.74	2,326.65	2,532.90	1,988.55	2,416.31
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	13.6	10.3	9.0	9.0	8.7	8.8	9.2	8.3
Industry	37.8	44.4	46.9	47.2	47.5	47.9	46.6	48.7
Services, etc.	48.6	45.3	44.0	43.8	43.8	43.3	44.3	43.0
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.	23.068	69.057	110.936	129.722	153.867	177.778	152.422	195.314
Imports, c.i.f.	33.045	61.924	118.178	128.773	139.966	179.225	133.709	182.921
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-6.751	11.701	3.392	13.664	26.631	17.394	32.607	31.677
Current Account	-7.281	9.313	-7.647	2.316	15.678	2.211	21.891	13.099
Overall Balance	3.235	-1.806	5.417	12.669	17.077	24.440	24.131	31.246
Foreign Exchange Rate (THB/USD) *1	25.5855	40.1118	40.2201	37.8820	34.5182	33.3133	34.2858	31.6857
Purchasing Power Parity (THB/International Dollar) *1	13.4679	15.9842	15.9321	16.2434	16.3308	16.6056	16.7507	17.1665
Price Indices								
GDP Deflator (1988=100) *3	112.2	163.6	183.8	193.5	200.2	208.0	212.1	219.9
Wholesale Price Index (2005=100) *2	55.6	79.2	100.0	107.1	110.5	124.3	119.6	130.8
Consumer Price Index (2005=100) *2	57.5	89.4	100.0	104.6	107.0	112.8	111.8	115.5
Growth Rate (%) *3								
Real GDP	11.17	4.75	4.60	5.09	5.04	2.48	-2.33	7.81
Population	1.40	1.20	0.97	0.87	0.77	0.70	0.64	0.61
Price								
Wholesale Price Index	3.5	3.9	9.1	7.1	3.2	12.4	-3.8	9.4
Consumer Price Index	5.9	1.6	4.5	4.6	2.3	5.4	-0.9	3.3

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"

: THB means Baht, USD means United States Dollar

: PPP means Purchasing Power Parity

## Energy Price of Thailand in 2010

## Currency Exchange Rate

	Local currency / US Dollar	31.87
<b>Currency Exchange Rate</b>		
<b>Local Currency Unit</b>		THB

## 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	Baht/ton	4,112.0	Anthracite			Anthracite		
Other bituminous coal	Baht/ton	2,349.0	Other bituminous coal			Other bituminous coal		
Sub-bituminous Coal			Sub-bituminous Coal			Sub-bituminous Coal		
Lignite			Lignite	Baht/ton	500.0	Lignite	Baht/ton	523.0
Peat			Peat			Peat		
Patent Fuel			Patent Fuel			Patent Fuel		
Coke	Baht/ton	13,999.0	Coke			Coke		
Coal Tar			Coal Tar			Coal Tar		
BKB/PB	Baht/ton	1,978.0	BKB/PB			BKB/PB		
			Gas Works Gas			Gas Works Gas		
<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>			<b>Oil and Oil Products</b>		
Crude Oil	USD / bbl	79.38	Crude Oil			Crude Oil		
Natural Gas Liquids			Natural Gas Liquids			Natural Gas Liquids		
Ethane			Ethane			Ethane		
LPG			LPG	Baht/kg	13.69	LPG	Baht/litre	9.79
Naphtha			Naphtha			Naphtha		
Motor Gasoline			Motor Gasoline	Baht/litre	31.24	Motor Gasoline (ULG 95)	Baht/litre	31.62
Aviation Gasoline			Aviation Gasoline			Aviation Gasoline		
Gasoline Type Jet Fuel			Gasoline Type Jet Fuel			Gasoline Type Jet Fuel		
Kerosene Type Jet Fuel	Baht/litre	37.91	Kerosene Type Jet Fuel			Kerosene Type Jet Fuel	Baht/litre	27.50
Other Kerosene			Other Kerosene	Baht/litre	23.03	Other Kerosene	Baht/litre	37.51
Gas/Diesel Oil	Baht/litre	21.66	Gas/Diesel Oil	Baht/litre	26.77	Gas/Diesel Oil (HSD)	Baht/litre	28.69
Fuel Oil	Baht/litre	15.66	Fuel Oil	Baht/litre	16.80	Fuel Oil (1500)	Baht/litre	22.04
White Spirit SBP			White Spirit SBP			White Spirit SBP		
Lubricants			Lubricants			Lubricants		
Bitumen			Bitumen			Bitumen		
Paraffin Waxes			Paraffin Waxes			Paraffin Waxes		
Petroleum Coke			Petroleum Coke			Petroleum Coke		
<b>Natural Gas</b>			<b>Natural Gas</b>			<b>Natural Gas</b>		
Natural Gas	USD / kscf	7.16	Natural Gas			Natural Gas	Baht/MMBTU	321.00
Liquefied Natural Gas			Liquefied Natural Gas			Liquefied Natural Gas		
Compressed Natural Gas			Compressed Natural Gas			Compressed Natural Gas	Baht/kg	8.50
<b>Electricity</b>			<b>Electricity</b>			<b>Electricity</b>		
Electricity	Baht/kWh	1.00	Electricity			Industrial	Baht/kWh	2.72
						Commercial	Baht/kWh	3.65
						Residential	Baht/kWh	3.34
						Others	Baht/kWh	4.32
<b>Other Energy Products</b>			<b>Other Energy Products</b>			<b>Other Energy Products</b>		
						Fuel Wood	Baht/kg	4.00
						Charcoal	Baht/kg	7.00
						Paddy Husk	Baht/kg	2.00
						Bagasse	Baht/kg	0.40
						Agricultural waste	Baht/kg	1.00

## 3.20 United States of America



## Energy Balance Table of United States of America

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					Gas/Diesel Oil
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	
<b>2010</b>									
Indigenous Production	531,848	-	344,921	-	-	-	-	-	-
Import	10,682	758	540,002	83,477	7,533	32,717	3,921	97	8,784
Export	-47,327	-914	-9,997	-105,259	-13,651	-1,870	-4,795	-77	-33,072
International Marine Bunkers	-	-	-	-62,639	-	-	-	-	-42,298
International Aviation Bunkers	-	-	-	-21,565	-	-	-21,565	-	-
Stock Changes	7,549	46	-1,429	-543	2,765	-2,410	-164	8	171
<b>Total Primary Energy Supply</b>	<b>502,752</b>	<b>-110</b>	<b>873,497</b>	<b>-106,529</b>	<b>-3,353</b>	<b>28,437</b>	<b>-22,602</b>	<b>28</b>	<b>-66,415</b>
Transfers	-	-	-41,559	43,384	27,376	-26,170	-484	89	94
<b>Total Transformation Sector</b>	<b>-479,228</b>	<b>3,524</b>	<b>-818,815</b>	<b>857,100</b>	<b>404,160</b>	<b>10,139</b>	<b>71,115</b>	<b>436</b>	<b>200,054</b>
Main Activity Producer	-458,840	-304	-	-23,130	-	-	-828	-406	-14,031
Autoproducers	-3,638	-754	-	-892	-	-	-97	-	-381
Gas Processing	-1,919	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-842,408	881,122	404,160	10,139	72,040	842	214,466
Coal Transformation	-14,831	4,582	-	-	-	-	-	-	-
Other Transformation	-	-	23,593	-	-	-	-	-	-
Loss & Own Use	-195	-1,379	-	-47,288	-3	-5	-33	-	-162
Discrepancy	-2,165	-0	-9,560	-2,899	-2,680	-17	3	-2	64
<b>Total Final Energy Consumption</b>	<b>21,164</b>	<b>2,035</b>	<b>3,563</b>	<b>743,768</b>	<b>425,499</b>	<b>12,383</b>	<b>47,999</b>	<b>551</b>	<b>133,634</b>
<b>Industry Sector</b>	<b>19,656</b>	<b>2,035</b>	<b>60</b>	<b>24,333</b>	<b>3,800</b>	<b>-</b>	<b>-</b>	<b>86</b>	<b>15,516</b>
Iron and Steel	-	1,260	1	726	-	-	-	-	457
Chemical & Petrochemical	4,276	-	-	6,443	-	-	-	-	4,510
Non-metallic Minerals	5,121	-	7	3,341	-	-	-	-	3,220
Other Industries	10,259	776	53	13,823	3,800	-	-	86	7,329
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>32</b>	<b>559,197</b>	<b>418,924</b>	<b>-</b>	<b>47,999</b>	<b>-</b>	<b>91,793</b>
Domestic Air Transport	-	-	-	48,638	639	-	47,999	-	-
Road	-	-	32	500,172	414,822	-	-	-	84,940
Rail	-	-	-	6,251	-	-	-	-	6,251
Inland Waterways	-	-	-	3,535	3,464	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	602	-	-	-	-	602
<b>Other Sector</b>	<b>1,509</b>	<b>-</b>	<b>727</b>	<b>41,678</b>	<b>2,776</b>	<b>-</b>	<b>-</b>	<b>466</b>	<b>26,326</b>
Residential	-	-	549	17,102	-	-	-	389	9,598
Commerce and Public Services	1,509	-	97	12,476	1,083	-	-	64	7,383
Agriculture	-	-	81	12,100	1,693	-	-	13	9,345
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>2,744</b>	<b>118,560</b>	<b>-</b>	<b>12,383</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	530,133	-	333,892	-	-	-	-	-	-
Import	12,540	217	535,092	78,873	11,646	28,900	2,776	132	7,897
Export	-34,049	-817	-8,975	-91,180	-9,082	-811	-3,901	-226	-29,562
International Marine Bunkers	-	-	-	-24,076	-	-	-	-	-4,828
International Aviation Bunkers	-	-	-	-21,312	-	-	-21,312	-	-
Stock Changes	-23,134	87	-1,710	-3,673	1,709	-2,902	-687	-31	-2,504
<b>Total Primary Energy Supply</b>	<b>485,490</b>	<b>-513</b>	<b>858,298</b>	<b>-61,368</b>	<b>4,273</b>	<b>25,187</b>	<b>-23,124</b>	<b>-126</b>	<b>-28,998</b>
Transfers	-	-	-38,426	40,103	25,590	-26,905	-186	90	-35
<b>Total Transformation Sector</b>	<b>-452,161</b>	<b>2,871</b>	<b>-809,309</b>	<b>841,518</b>	<b>389,110</b>	<b>9,549</b>	<b>70,715</b>	<b>1,003</b>	<b>205,245</b>
Main Activity Producer	-436,870	-304	-	-9,274	-	-	-108	-63	-1,642
Autoproducers	-2,503	-567	-	-486	-	-	-	-5	-111
Gas Processing	-1,944	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-829,799	851,279	389,110	9,549	70,822	1,071	206,998
Coal Transformation	-10,843	3,742	-	-	-	-	-	-	-
Other Transformation	-	-	20,490	-	-	-	-	-	-
Loss & Own Use	-183	-989	-	-47,330	-2	-10	-33	-	-101
Discrepancy	-13,300	1	-7,753	4	-3,173	4,062	67	-3	-570
<b>Total Final Energy Consumption</b>	<b>19,847</b>	<b>1,370</b>	<b>2,811</b>	<b>772,926</b>	<b>415,798</b>	<b>11,882</b>	<b>47,438</b>	<b>965</b>	<b>175,542</b>
<b>Industry Sector</b>	<b>18,259</b>	<b>1,370</b>	<b>47</b>	<b>27,533</b>	<b>3,834</b>	<b>-</b>	<b>-</b>	<b>94</b>	<b>19,148</b>
Iron and Steel	-	817	1	805	-	-	-	-	564
Chemical & Petrochemical	4,190	-	-	7,300	-	-	-	-	5,565
Non-metallic Minerals	4,716	-	6	4,087	-	-	-	-	3,974
Other Industries	9,352	553	41	15,341	3,834	-	-	94	9,046
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>577,128</b>	<b>408,626</b>	<b>-</b>	<b>47,438</b>	<b>-</b>	<b>120,587</b>
Domestic Air Transport	-	-	-	48,050	612	-	47,438	-	-
Road	-	-	25	515,668	403,590	-	-	-	111,692
Rail	-	-	-	8,117	-	-	-	-	8,117
Inland Waterways	-	-	-	4,515	4,423	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	778	-	-	-	-	778
<b>Other Sector</b>	<b>1,588</b>	<b>-</b>	<b>573</b>	<b>51,557</b>	<b>3,338</b>	<b>-</b>	<b>-</b>	<b>870</b>	<b>35,807</b>
Residential	-	-	433	21,883	-	-	-	735	14,447
Commerce and Public Services	1,588	-	76	15,705	1,284	-	-	112	10,456
Agriculture	-	-	64	13,969	2,054	-	-	23	10,904
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>2,165</b>	<b>116,708</b>	<b>-</b>	<b>11,882</b>	<b>-</b>	<b>-</b>	<b>-</b>

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	495,180	24,625	218,625	25,441	91,184	-	-	1,731,824
21,269	1,348	-	9	7,798	86,918	-	-	-	79	3,877	-	725,792
-22,371	-	-	-	-29,423	-26,153	-	-	-	-987	-1,643	-	-192,280
-20,341	-	-	-	-	-	-	-	-	-	-	-	-62,639
-	-	-	-	-	-	-	-	-	-	-	-	-21,565
-750	76	-	-	-239	548	-	-	-	-105	-	-	6,067
-22,192	1,423	-	9	-21,864	556,493	24,625	218,625	25,441	90,171	2,234	-	2,187,199
462	20,687	-	21,528	-198	-	-	-	-	-	-	-	1,825
29,104	24,555	38,820	506	78,210	-183,815	-24,625	-218,625	-23,831	-45,360	376,544	12,140	-544,992
-3,533	-	-	-	-4,332	-171,238	-24,471	-218,625	-23,603	-13,959	362,444	12,140	-559,585
-62	-	-	-	-353	-13,849	-153	-	-228	-6,290	14,100	-	-11,705
-	-	-	-	-	1,272	-	-	-	-	-	-	-647
32,699	24,555	38,820	506	82,895	-	-	-	-	-	-	-	38,714
-	-	-	-	-	-	-	-	-	-	-	-	-10,249
-	-	-	-	-	-	-	-	-	-25,112	-	-	-1,519
-183	-482	-34,902	-4	-11,514	-47,293	-	-	-	-	-51,813	-5,503	-153,471
-247	3	0	-	-23	-6,221	0	-	0	-1	0	-	-20,846
6,943	46,187	3,919	22,041	44,612	319,163	-	-	1,610	44,810	326,965	6,637	1,469,716
4,181	751	-	-	-	111,346	-	-	106	32,190	75,630	5,244	270,601
256	12	-	-	-	7,756	-	-	-	-	6,589	193	16,524
1,934	-	-	-	-	34,031	-	-	-	199	20,822	3,214	68,984
39	81	-	-	-	11,778	-	-	-	517	3,480	4	24,248
1,951	657	-	-	-	57,781	-	-	106	31,474	44,739	1,834	160,845
71	410	-	-	-	16,230	-	-	-	-	663	-	576,123
-	-	-	-	-	-	-	-	-	-	-	-	48,638
-	410	-	-	-	711	-	-	-	-	-	-	500,915
-	-	-	-	-	-	-	-	-	-	663	-	6,914
71	-	-	-	-	-	-	-	-	-	-	-	3,535
-	-	-	-	-	15,519	-	-	-	-	-	-	15,519
-	-	-	-	-	-	-	-	-	-	-	-	602
2,691	9,419	-	-	-	182,128	-	-	1,505	12,620	250,672	1,393	492,230
-	7,115	-	-	-	111,077	-	-	1,421	10,053	124,331	-	264,533
2,691	1,255	-	-	-	71,051	-	-	83	2,194	114,386	1,393	203,188
-	1,049	-	-	-	-	-	-	-	373	-	-	12,554
-	-	-	-	-	-	-	-	-	-	11,955	-	11,955
-	35,606	3,919	22,041	44,612	9,459	-	-	-	-	-	-	130,762
-	-	-	-	-	479,729	25,663	216,353	23,034	83,768	-	-	1,692,571
19,291	1,072	-	9	7,149	87,033	-	-	-	544	4,488	-	718,788
-22,206	-	-	-	-25,391	-24,634	-	-	-	-566	-1,560	-	-161,781
-19,248	-	-	-	-	-	-	-	-	-	-	-	-24,076
-	-	-	-	-	-	-	-	-	-	-	-	-21,312
-123	-20	-	73	813	-6,748	-	-	-	-254	-	-	-35,432
-22,285	1,052	-	83	-17,429	535,380	25,663	216,353	23,034	83,492	2,929	-	2,168,758
204	21,275	-	20,034	37	-	-	-	-	-	-	-	1,677
29,090	21,714	38,427	494	76,171	-171,441	-25,663	-216,353	-21,440	-40,983	360,186	12,433	-520,341
-4,151	-	-	-	-3,311	-159,754	-25,493	-216,353	-21,307	-13,513	347,355	12,433	-523,080
-116	-	-	-	-254	-12,931	-170	-	-133	-5,660	12,831	-	-9,619
-	-	-	-	-	1,244	-	-	-	-	-	-	-700
33,357	21,714	38,427	494	79,736	-	-	-	-	-	-	-	21,480
-	-	-	-	-	-	-	-	-	-	-	-	-7,102
-	-	-	-	-	-	-	-	-	-21,810	-	-	-1,320
-197	-545	-34,988	-1	-11,454	-46,234	-	-	-	-	-49,886	-5,639	-150,261
-300	-1	1	1	-81	-5,623	-	-	-	60	-	-	-26,611
6,512	43,495	3,441	20,610	47,244	312,081	-	-	1,594	42,569	313,229	6,793	1,473,221
3,751	706	-	-	-	105,719	-	-	106	29,673	68,720	5,368	256,795
230	11	-	-	-	7,363	-	-	-	-	5,987	197	15,171
1,735	-	-	-	-	32,311	-	-	-	174	18,919	3,289	66,184
36	77	-	-	-	11,183	-	-	-	433	3,162	4	23,591
1,749	618	-	-	-	54,861	-	-	106	29,066	40,652	1,877	151,848
91	386	-	-	-	14,585	-	-	-	-	671	-	592,409
-	-	-	-	-	-	-	-	-	-	-	-	48,050
-	386	-	-	-	677	-	-	-	-	-	-	516,371
-	-	-	-	-	-	-	-	-	-	671	-	8,788
91	-	-	-	-	-	-	-	-	-	-	-	4,515
-	-	-	-	-	13,907	-	-	-	-	-	-	13,907
-	-	-	-	-	-	-	-	-	-	-	-	778
2,670	8,872	-	-	-	182,796	-	-	1,488	12,896	243,838	1,426	496,162
-	6,700	-	-	-	111,088	-	-	1,407	10,292	117,154	-	262,257
2,670	1,183	-	-	-	71,709	-	-	81	2,263	113,813	1,426	206,660
-	988	-	-	-	-	-	-	-	341	-	-	14,375
-	-	-	-	-	-	-	-	-	-	12,870	-	12,870
-	33,531	3,441	20,610	47,244	8,981	-	-	-	-	-	-	127,854

## Major Energy Indicators of United States of America

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	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	1,916,495	2,279,178	2,329,478	2,305,471	2,345,628	2,285,613	2,168,758	2,187,199
Indigenous Production	1,653,987	1,672,986	1,641,700	1,663,052	1,677,528	1,710,085	1,692,571	1,731,824
Import	452,509	702,062	841,978	842,856	840,972	801,473	718,788	725,792
Export	-110,606	-95,684	-105,877	-113,384	-127,430	-165,636	-161,781	-192,280
Final Energy Consumption	1,291,622	1,545,626	1,572,358	1,567,467	1,587,655	1,547,831	1,473,221	1,469,716
Industry	281,801	329,457	282,391	296,478	294,356	289,778	256,795	270,601
Transport	487,565	590,374	628,258	632,610	637,701	613,611	592,409	576,123
Residential	209,907	264,075	271,689	253,530	267,367	267,889	262,257	264,533
Commerce & Public Services	159,284	193,071	200,410	197,460	204,727	206,816	206,660	203,188
Others	153,065	168,649	189,610	187,390	183,503	169,736	155,099	155,272
<b>Coal, Coal Products</b>								
Primary Energy Supply	460,199	533,627	558,412	550,515	554,803	545,764	484,978	502,642
Indigenous Production	542,320	536,856	565,282	577,566	568,497	579,299	530,133	531,848
Import	2,119	10,014	19,598	23,188	22,208	21,096	12,757	11,440
Export	-67,987	-38,315	-29,460	-29,491	-34,691	-48,222	-34,866	-48,241
Transformation Sector	-406,761	-514,084	-512,196	-507,126	-513,843	-509,281	-449,290	-475,704
Power Generation	-391,176	-498,080	-503,961	-496,078	-504,942	-496,203	-440,245	-463,536
Final Energy Consumption	53,691	29,737	28,624	28,289	27,996	26,859	21,217	23,199
Industry	44,053	27,519	26,091	26,733	26,245	25,126	19,629	21,691
Transport	-	-	-	-	-	-	-	-
Residential	1,487	1,327	-	-	-	-	-	-
Commerce & Public Services	2,412	890	2,103	1,534	1,703	1,733	1,588	1,509
Others	5,739	-	430	23	48	-	-	-
<b>Crude Oil</b>								
Primary Energy Supply	783,541	890,289	913,297	917,933	910,922	890,956	858,298	873,497
Indigenous Production	432,544	368,843	324,230	317,805	317,456	312,913	333,892	344,921
Import	351,037	524,256	599,493	604,718	597,915	589,004	535,092	540,002
Export	-2,100	-6,151	-4,911	-5,605	-5,830	-6,498	-8,975	-9,997
Transformation Sector	-755,275	-838,485	-853,366	-856,896	-853,968	-851,219	-809,309	-818,815
Petroleum Refineries	-755,275	-841,472	-860,851	-867,258	-867,073	-869,273	-829,799	-842,408
<b>Petroleum Products</b>								
Primary Energy Supply	-26,699	-15,906	17,564	-3,902	-7,583	-42,891	-61,368	-106,529
Import	62,247	75,823	117,923	112,647	108,061	92,452	78,873	83,477
Export	-36,779	-44,383	-53,109	-59,620	-65,725	-85,297	-91,180	-105,259
Transformation Sector	726,214	819,580	844,674	866,436	867,569	880,107	841,518	857,100
Power Generation	-27,247	-29,565	-30,044	-15,943	-16,230	-11,676	-9,761	-24,022
Petroleum Refineries	753,816	849,145	874,719	882,379	883,798	891,783	851,279	881,122
Final Energy Consumption	683,288	798,743	855,741	857,334	852,104	810,187	772,926	743,768
Industry	44,253	25,661	35,150	35,494	31,129	31,693	27,533	24,333
Transport	471,796	574,812	613,448	617,802	621,921	597,251	577,128	559,197
Residential	26,368	31,906	28,784	24,371	25,144	23,080	21,883	17,102
Commerce & Public Services	21,308	16,656	16,696	14,927	14,534	13,677	15,705	12,476
Others	119,563	149,708	161,663	164,740	159,376	144,486	130,678	130,659
<b>Natural Gas</b>								
Primary Energy Supply	438,370	547,851	507,155	502,216	542,711	540,942	535,380	556,493
Indigenous Production	418,210	446,947	421,558	431,698	449,905	469,800	479,729	495,180
Import	35,170	87,781	100,874	97,231	107,228	92,333	87,033	86,918
Export	-1,976	-5,574	-16,694	-16,581	-18,873	-22,096	-24,634	-26,153
Transformation Sector	-88,608	-135,773	-153,459	-157,104	-171,969	-167,115	-171,441	-183,815
Power Generation	-89,762	-136,917	-154,656	-158,371	-173,162	-168,292	-172,685	-185,087
Final Energy Consumption	303,077	359,988	317,072	304,330	321,791	328,828	312,081	319,163
Industry	109,917	137,920	107,001	113,441	116,875	116,612	105,719	111,346
Transport	15,414	15,182	14,164	14,175	15,078	15,698	14,585	16,230
Residential	102,586	116,262	112,649	101,854	110,319	113,955	111,088	111,077
Commerce & Public Services	61,269	73,195	68,874	65,223	69,591	72,656	71,709	71,051
Others	13,890	17,429	14,384	9,638	9,929	9,906	8,981	9,459
<b>Electricity</b>								
Power Generation	276,801	348,529	369,316	369,871	374,086	375,670	360,186	376,544
Thermal	157,406	231,904	248,292	248,688	253,848	252,572	234,853	248,025
Hydro	24,851	24,079	25,622	27,321	23,697	24,252	25,663	24,625
Nuclear	53,127	69,295	70,425	70,900	72,676	72,777	72,118	72,875
Others	41,418	23,251	24,977	22,962	23,866	26,069	27,553	31,019
Final Energy Consumption	226,487	300,954	319,590	320,176	329,018	327,903	313,229	326,965
Industry	74,523	98,222	79,449	78,837	79,879	78,681	68,720	75,630
Transport	355	380	646	633	703	662	671	663
Residential	79,466	102,550	116,894	116,231	119,733	118,678	117,154	124,331
Commerce & Public Services	72,144	99,786	109,657	111,778	114,923	114,894	113,813	114,386
Others	-	15	12,945	12,697	13,780	14,987	12,870	11,955

## Major Economic Indicators of United States of America

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	249.62	282.16	295.52	298.38	301.23	304.09	306.77	309.35
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	7,063.94	9,898.80	11,146.30	11,442.69	11,660.93	11,619.05	11,209.19	11,547.91
Real Term (Billions of 2000 Price and 2000 PPP)	7,063.94	9,898.80	11,146.30	11,442.69	11,660.93	11,619.05	11,209.19	11,547.91
Nominal (Billions of Current USD)	5,750.80	9,898.80	12,564.30	13,314.50	13,961.80	14,219.30	13,863.60	14,447.10
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	28,298	35,082	37,718	38,349	38,711	38,209	36,539	37,330
Real Term (2000 Price and 2000 PPP)	28,298	35,082	37,718	38,349	38,711	38,209	36,539	37,330
Nominal (Current USD)	23,038	35,082	42,516	44,623	46,349	46,760	45,192	46,702
Nominal GDP & its Components (Billions of Current USD) *1								
Gross Domestic Product	5,750.80	9,898.80	12,564.30	13,314.50	13,961.80	14,219.30	13,863.60	14,447.10
Household Final Consumption Expenditure, etc.	3,835.40	6,830.40	8,803.50	9,301.00	9,772.20	10,035.50	9,866.10	10,245.60
General Government Final Consumption Expenditure	980.50	1,413.70	1,981.40	2,099.90	2,225.90	2,399.80	2,433.30	2,522.70
Gross Fixed Capital Formation	1,003.40	1,982.20	2,452.50	2,622.70	2,647.10	2,534.40	2,115.10	2,128.90
Stock Change	13.10	54.60	49.60	60.20	29.70	-40.80	-159.40	66.80
Exports of Goods and Services	552.10	1,093.20	1,305.10	1,471.00	1,661.70	1,846.80	1,583.00	1,839.80
Imports of Goods and Services	629.70	1,475.30	2,027.80	2,240.30	2,374.80	2,556.50	1,974.60	2,356.70
Real GDP & its Components (Billions of 2000 USD) *1								
Gross Domestic Product	7,962.60	11,158.10	12,564.30	12,898.40	13,144.40	13,097.20	12,635.20	13,017.00
Household Final Consumption Expenditure, etc.	5,273.00	7,606.90	8,803.50	9,054.20	9,262.10	9,213.50	9,042.60	9,225.30
General Government Final Consumption Expenditure	1,594.80	1,731.90	1,981.40	2,004.70	2,032.00	2,085.80	2,127.70	2,149.70
Gross Fixed Capital Formation	1,195.10	2,271.10	2,502.10	2,569.10	2,500.10	2,289.80	1,808.40	2,055.80
Stock Change	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Exports of Goods and Services	599.70	1,187.40	1,305.10	1,422.10	1,554.40	1,649.30	1,494.00	1,663.20
Imports of Goods and Services	672.60	1,638.70	2,027.80	2,151.50	2,203.20	2,144.00	1,852.80	2,085.00
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	0.9	1.1	1.1	1.0	0.9	1.0	1.1	1.1
Industry	22.9	22.2	20.7	20.4	20.4	19.4	18.5	19.1
Services, etc.	76.2	76.8	78.2	78.5	78.6	79.6	80.3	79.9
Industrial Production Index (2005=100) *2	64.9	96.5	100.0	102.2	105.0	101.5	91.6	94.5
External Trade (Billions of Current USD) *1								
Exports, f.o.b.	393.592	781.918	901.082	1,025.967	1,148.199	1,287.442	1,056.043	1,278.263
Imports, c.i.f.	516.987	1,259.300	1,732.706	1,918.077	2,020.403	2,169.487	1,605.296	1,969.184
Balance of Payments (Billions of Current USD) *2								
Trade Balance	-110.262	-443.865	-777.800	-832.896	-815.836	-827.136	-502.540	-642.359
Current Account	-78.952	-416.343	-745.780	-800.618	-710.299	-677.141	-376.554	-470.902
Overall Balance	2.233	0.295	-14.100	-2.392	0.125	4.839	52.182	1.823
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 (2005=100) *3	72.2	88.7	100.0	103.2	106.2	108.6	109.7	111.0
Wholesale Price Index (2005=100) *2	73.9	84.3	100.0	104.7	109.7	120.5	109.9	117.4
Consumer Price Index (2005=100) *2	73.7	86.1	100.0	103.4	108.1	116.1	111.6	117.8
Growth Rate (%) *3								
Real GDP	1.86	4.17	3.08	2.66	1.91	-0.36	-3.53	3.02
Population	1.14	1.12	0.93	0.97	0.96	0.95	0.88	0.84
Price								
Wholesale Price Index	3.6	5.8	7.3	4.7	4.8	9.8	-8.8	6.8
Consumer Price Index	5.4	4.7	5.8	3.4	4.5	7.4	-3.9	5.6

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

	Coal	Coal Products	Crude Oil & NGL	Petroleum Products					
				Total	Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil
<b>2010</b>									
Indigenous Production	24,646	-	16,053	-	-	-	-	-	-
Import	576	79	-	12,703	2,066	0	858	33	5,013
Export	-11,031	-72	-8,121	-1,531	-258	-	-52	-27	-989
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	532	-	-499	1,597	473	-	-	84	694
<b>Total Primary Energy Supply</b>	<b>14,723</b>	<b>7</b>	<b>7,434</b>	<b>12,769</b>	<b>2,281</b>	<b>0</b>	<b>806</b>	<b>91</b>	<b>4,718</b>
Transfers	-	-	-817	817	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-4,837</b>	<b>-</b>	<b>-5,606</b>	<b>4,545</b>	<b>2,446</b>	<b>-</b>	<b>40</b>	<b>-</b>	<b>2,465</b>
Main Activity Producer	-4,720	-	-	-632	-	-	-	-	-259
Autoproducers	-117	-	-	-529	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-5,606	5,706	2,446	-	40	-	2,723
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-1,011	-	-	-	-	-	-
Discrepancy	-0	-0	-0	0	0	-0	-	-1	-0
<b>Total Final Energy Consumption</b>	<b>9,886</b>	<b>7</b>	<b>-</b>	<b>18,131</b>	<b>4,727</b>	<b>0</b>	<b>847</b>	<b>90</b>	<b>7,182</b>
<b>Industry Sector</b>	<b>8,298</b>	<b>7</b>	<b>-</b>	<b>2,127</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>1,175</b>
Iron and Steel	350	7	-	85	-	-	-	0	55
Chemical & Petrochemical	182	-	-	97	-	-	-	1	64
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	7,766	-	-	1,945	-	-	-	12	1,056
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11,164</b>	<b>4,598</b>	<b>-</b>	<b>847</b>	<b>-</b>	<b>5,323</b>
Domestic Air Transport	-	-	-	847	-	-	847	-	-
Road	-	-	-	9,921	4,598	-	-	-	5,323
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	396	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	-	-	-	-	-	-
<b>Other Sector</b>	<b>1,588</b>	<b>-</b>	<b>-</b>	<b>2,084</b>	<b>129</b>	<b>-</b>	<b>-</b>	<b>78</b>	<b>683</b>
Residential	1,204	-	-	874	-	-	-	62	41
Commerce and Public Services	364	-	-	704	-	-	-	15	265
Agriculture	20	-	-	507	129	-	-	-	377
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,756</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2009</b>									
Indigenous Production	24,480	-	17,317	-	-	-	-	-	-
Import	448	60	-	14,806	3,818	3	677	58	6,601
Export	-13,995	-0	-13,614	-1,813	-279	-	-330	-35	-772
International Marine Bunkers	-	-	-	-	-	-	-	-	-
International Aviation Bunkers	-	-	-	-	-	-	-	-	-
Stock Changes	1,652	-	-1,008	1,266	-	-	206	83	660
<b>Total Primary Energy Supply</b>	<b>12,585</b>	<b>60</b>	<b>2,696</b>	<b>14,259</b>	<b>3,539</b>	<b>3</b>	<b>553</b>	<b>106</b>	<b>6,489</b>
Transfers	-	-	-724	724	-	-	-	-	-
<b>Total Transformation Sector</b>	<b>-3,680</b>	<b>-</b>	<b>-1,972</b>	<b>868</b>	<b>708</b>	<b>-</b>	<b>84</b>	<b>-</b>	<b>539</b>
Main Activity Producer	-3,560	-	-	-266	-	-	-	-	-22
Autoproducers	-119	-	-	-380	-	-	-	-	-
Gas Processing	-	-	-	-	-	-	-	-	-
Petroleum Refineries	-	-	-1,972	1,515	708	-	84	-	561
Coal Transformation	-	-	-	-	-	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Loss & Own Use	-	-	-	-	-	-	-	-	-
Discrepancy	0	-	-0	-0	-0	-	-	0	-0
<b>Total Final Energy Consumption</b>	<b>8,906</b>	<b>60</b>	<b>-</b>	<b>15,851</b>	<b>4,247</b>	<b>3</b>	<b>636</b>	<b>106</b>	<b>7,027</b>
<b>Industry Sector</b>	<b>7,446</b>	<b>60</b>	<b>-</b>	<b>2,146</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>1,167</b>
Iron and Steel	-	-	-	-	-	-	-	-	-
Chemical & Petrochemical	-	-	-	-	-	-	-	-	-
Non-metallic Minerals	-	-	-	-	-	-	-	-	-
Other Industries	7,446	60	-	2,146	-	-	-	9	1,167
<b>Transport Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,274</b>	<b>4,116</b>	<b>-</b>	<b>636</b>	<b>-</b>	<b>5,163</b>
Domestic Air Transport	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Inland Waterways	-	-	-	-	-	-	-	-	-
Pipeline Transport	-	-	-	-	-	-	-	-	-
Non-specified Transport	-	-	-	10,274	4,116	-	636	-	5,163
<b>Other Sector</b>	<b>1,460</b>	<b>-</b>	<b>-</b>	<b>2,017</b>	<b>131</b>	<b>-</b>	<b>-</b>	<b>96</b>	<b>697</b>
Residential	1,089	-	-	816	-	-	-	71	46
Commerce and Public Services	350	-	-	683	-	-	-	26	274
Agriculture	21	-	-	518	131	-	-	-	378
Non-specified Others	-	-	-	-	-	-	-	-	-
<b>Non-energy</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,414</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

unit: ktoe

Fuel Oil	LPG	Refinery Gas	Ethane	Other Products	Gas	Hydro	Nuclear	Geothermal, Solar, etc.	Others	Electricity	Heat	Total
-	-	-	-	-	8,123	2,455	-	-	-	-	-	51,277
1,762	767	-	-	2,203	-	-	-	-	-	482	-	13,840
-205	-	-	-	-0	-	-	-	-	-	-83	-	-20,838
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
347	-	-	-	-	-	-	-	-	-	-	-	1,630
1,904	767	-	-	2,202	8,123	2,455	-	-	-	399	-	45,910
-	264	-	-	553	-	-	-	-	-	-	-	-
-756	350	-	-	-	-7,631	-2,455	-	-	-	8,215	-	-7,769
-373	-	-	-	-	-7,378	-2,455	-	-	-	7,947	-	-7,238
-529	-	-	-	-	-253	-	-	-	-	268	-	-631
-	-	-	-	-	-	-	-	-	-	-	-	-
146	350	-	-	-	-	-	-	-	-	-	-	100
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
0	-0	-	-	0	0	-	-	-	-	-1,085	-	-2,095
-	-	-	-	-	-	-	-	-	-	-53	-	-53
1,148	1,381	-	-	2,756	493	-	-	-	-	7,476	-	35,992
727	213	-	-	-	493	-	-	-	-	4,000	-	14,926
26	4	-	-	-	20	-	-	-	-	287	-	749
29	3	-	-	-	202	-	-	-	-	254	-	734
-	-	-	-	-	-	-	-	-	-	-	-	-
673	205	-	-	-	271	-	-	-	-	3,460	-	13,443
396	-	-	-	-	-	-	-	-	-	-	-	11,164
-	-	-	-	-	-	-	-	-	-	-	-	847
-	-	-	-	-	-	-	-	-	-	-	-	9,921
-	-	-	-	-	-	-	-	-	-	-	-	-
396	-	-	-	-	-	-	-	-	-	-	-	396
-	-	-	-	-	-	-	-	-	-	-	-	-
25	1,169	-	-	-	-	-	-	-	-	3,475	-	7,147
5	766	-	-	-	-	-	-	-	-	2,709	-	4,786
20	403	-	-	-	-	-	-	-	-	685	-	1,753
-	-	-	-	-	-	-	-	-	-	81	-	607
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	2,756	-	-	-	-	-	-	-	2,756
-	-	-	-	-	7,101	2,578	-	-	-	-	-	51,477
1,838	843	-	-	968	-	-	-	-	-	353	-	15,667
-397	-	-	-	-0	-	-	-	-	-	-32	-	-29,454
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
317	-	-	-	-	-	-	-	-	-	-	-	1,910
1,758	843	-	-	968	7,101	2,578	-	-	-	321	-	39,600
-	281	-	-	443	-	-	-	-	-	-	-	0
-587	125	-	-	-	-6,462	-2,578	-	-	-	6,837	-	-6,987
-243	-	-	-	-	-6,243	-2,578	-	-	-	6,622	-	-6,026
-380	-	-	-	-	-219	-	-	-	-	215	-	-504
-	-	-	-	-	-	-	-	-	-	-	-	-
37	125	-	-	-	-	-	-	-	-	-	-	-458
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-769	-	-769
-0	0	-	-	-0	0	-	-	-	-	227	-	227
1,171	1,249	-	-	1,411	639	-	-	-	-	6,616	-	32,071
766	203	-	-	-	639	-	-	-	-	3,434	-	13,724
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
766	203	-	-	-	639	-	-	-	-	3,434	-	13,724
359	-	-	-	-	-	-	-	-	-	-	-	10,274
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
359	-	-	-	-	-	-	-	-	-	-	-	10,274
46	1,046	-	-	-	-	-	-	-	-	3,182	-	6,659
7	692	-	-	-	-	-	-	-	-	2,509	-	4,414
30	354	-	-	-	-	-	-	-	-	613	-	1,646
9	-	-	-	-	-	-	-	-	-	60	-	599
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	1,411	-	-	-	-	-	-	-	1,414



## Major Energy Indicators of Viet Nam

ktoe

	1990	2000	2005	2006	2007	2008	2009	2010
<b>Total</b>								
Primary Energy Supply	5,414	14,841	25,769	28,769	32,062	35,331	39,600	45,910
Indigenous Production	5,811	25,777	45,190	48,300	49,170	46,997	51,477	51,277
Import	2,947	8,885	12,331	12,317	15,499	15,485	15,667	13,840
Export	-3,125	-18,650	-30,064	-30,976	-34,642	-26,108	-29,454	-20,838
Final Energy Consumption	4,212	11,927	20,905	22,779	25,600	28,479	32,071	35,992
Industry	1,713	4,653	8,235	9,049	11,609	12,441	13,724	14,926
Transport	1,412	3,763	6,898	7,560	8,115	8,666	10,274	11,164
Residential	481	1,878	3,262	3,596	3,755	4,012	4,414	4,786
Commerce & Public Services	334	1,095	1,665	1,600	1,546	1,576	1,646	1,753
Others	272	537	846	974	576	1,785	2,013	3,363
<b>Coal, Coal Products</b>								
Primary Energy Supply	2,212	4,372	7,082	9,045	9,681	12,017	12,645	14,730
Indigenous Production	2,597	6,501	18,142	21,790	24,186	22,275	24,480	24,646
Import	-	-	57	64	439	452	508	656
Export	-442	-1,821	-10,072	-11,936	-17,854	-10,839	-13,995	-11,104
Transformation Sector	-	-	-2,132	-3,517	-3,592	-3,728	-3,680	-4,837
Power Generation	-888	-1,150	-2,132	-3,517	-3,592	-3,728	-3,680	-4,837
Final Energy Consumption	1,324	3,223	4,950	5,528	6,089	8,289	8,966	9,893
Industry	1,019	2,339	3,734	4,176	4,732	6,849	7,506	8,306
Transport	14	-	-	-	-	-	-	-
Residential	207	584	861	1,004	1,008	1,070	1,089	1,204
Commerce & Public Services	19	276	333	327	328	347	350	364
Others	64	24	22	22	21	22	21	20
<b>Crude Oil</b>								
Primary Energy Supply	-	20	674	607	670	691	2,696	7,434
Indigenous Production	2,750	16,584	19,609	18,117	16,876	15,863	17,317	16,053
Import	-	-	-	-	-	-	-	-
Export	-2,664	-15,701	-18,290	-17,510	-15,333	-14,000	-13,614	-8,121
Transformation Sector	-	-	-	-	-	-	-1,972	-5,606
Petroleum Refineries	-	-	-	-	-	-	-1,972	-5,606
<b>Petroleum Products</b>								
Primary Energy Supply	2,737	7,757	11,859	12,170	13,864	13,704	14,259	12,769
Import	2,947	8,885	12,274	12,170	14,834	14,757	14,806	12,703
Export	-19	-1,128	-415	-	-969	-1,053	-1,813	-1,531
Transformation Sector	-	-	-678	-483	-821	-592	868	4,545
Power Generation	-381	-1,310	-678	-483	-821	-592	-646	-1,161
Petroleum Refineries	-	-	-	-	-	-	1,515	5,706
Final Energy Consumption	2,356	6,759	11,855	12,294	13,713	13,806	15,851	18,131
Industry	449	1,515	2,499	2,235	3,570	2,025	2,146	2,127
Transport	1,393	3,742	6,898	7,560	8,078	8,622	10,274	11,164
Residential	76	336	727	731	727	701	816	874
Commerce & Public Services	265	690	958	864	832	753	683	704
Others	174	476	774	903	506	1,706	1,931	3,263
<b>Natural Gas</b>								
Primary Energy Supply	3	1,440	4,649	5,108	5,653	6,408	7,101	8,123
Indigenous Production	3	1,440	5,935	6,638	6,139	6,624	7,101	8,123
Import	-	-	-	-	-	-	-	-
Export	-	-	-1,286	-1,530	-486	-216	-	-
Transformation Sector	-	-	-4,549	-4,872	-4,916	-5,693	-6,462	-7,631
Power Generation	-3	-1,102	-4,549	-4,872	-4,916	-5,693	-6,462	-7,631
Final Energy Consumption	-	18	100	326	542	540	639	493
Industry	-	18	100	326	542	540	639	493
Transport	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Commerce & Public Services	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
<b>Electricity</b>								
Power Generation	746	2,284	4,598	5,285	5,750	6,282	6,837	8,215
Thermal	285	1,033	3,093	3,530	3,782	4,047	4,258	5,760
Hydro	462	1,251	1,505	1,755	1,968	2,235	2,578	2,455
Nuclear	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Final Energy Consumption	532	1,927	3,967	4,630	5,256	5,844	6,616	7,476
Industry	245	782	1,870	2,312	2,765	3,026	3,434	4,000
Transport	5	21	-	-	37	44	-	-
Residential	198	958	1,674	1,862	2,019	2,242	2,509	2,709
Commerce & Public Services	50	130	374	408	386	476	613	685
Others	34	37	49	49	49	57	60	81

## Major Economic Indicators of Viet Nam

	1990	2000	2005	2006	2007	2008	2009	2010
Population (Millions) *1	66.02	77.63	82.39	83.31	84.22	85.12	86.03	86.93
Gross Domestic Product *3								
Real Term (Billions of 2000 Price and 2000 USD)	15.02	31.17	44.77	48.45	52.55	55.87	58.84	62.83
Real Term (Billions of 2000 Price and 2000 PPP)	52.99	110.00	157.98	170.98	185.44	197.14	207.63	221.72
Nominal (Billions of Current USD)	6.47	31.17	52.92	60.91	71.02	91.09	97.18	106.43
GDP per Capita *3								
Real Term (2000 Price and 2000 USD)	227	402	543	582	624	656	684	723
Real Term (2000 Price and 2000 PPP)	803	1,417	1,917	2,052	2,202	2,316	2,414	2,551
Nominal (Current USD)	98	402	642	731	843	1,070	1,130	1,224
Nominal GDP & its Components (Billions of Current VND) *1								
Gross Domestic Product	41,955	441,646	839,211	974,266	1,143,715	1,485,038	1,658,390	1,980,914
Household Final Consumption Expenditure, etc.	35,559	293,507	533,141	617,182	740,615	1,000,972	1,102,279	1,317,588
General Government Final Consumption Expenditure	5,177	28,346	51,652	58,734	69,247	90,904	104,540	129,313
Gross Fixed Capital Formation	N.A.	122,101	275,841	324,949	437,702	513,987	572,526	704,401
Stock Change	N.A.	8,670	22,702	33,680	55,598	75,759	59,800	65,810
Exports of Goods and Services	15,120	243,049	582,069	717,109	879,461	1,157,178	1,132,688	1,535,816
Imports of Goods and Services	18,996	253,927	617,157	761,547	1,060,763	1,383,006	1,304,351	1,739,363
Real GDP & its Components (Billions of 1994 VND) *1								
Gross Domestic Product	131,844	273,666	393,031	425,373	461,344	490,458	516,568	551,609
Household Final Consumption Expenditure, etc.	N.A.	182,420	254,484	275,723	305,504	334,046	346,352	378,958
General Government Final Consumption Expenditure	N.A.	18,245	25,620	27,797	30,272	32,549	35,021	39,323
Gross Fixed Capital Formation	N.A.	78,552	133,141	146,325	181,673	188,647	205,107	227,452
Stock Change	N.A.	4,944	10,150	13,922	21,518	27,301	20,153	21,250
Exports of Goods and Services	22,632	141,911	325,707	292,911	325,974	342,432	380,373	436,106
Imports of Goods and Services	30,495	151,996	350,145	323,462	412,796	444,216	473,821	540,663
Sectional Shares of Real GDP (%) *1								
Agriculture, Fishery and Forest	32	23	20	19	18	18	17	16
Industry	25	35	40	41	42	42	42	42
Services, etc.	43	41	40	40	40	41	41	42
Industrial Production Index (2005=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.	2.404	14.483	32.442	39.826	48.561	62.685	57.096	72.237
Imports, c.i.f.	2.752	15.638	36.761	45.015	62.682	80.714	69.949	84.839
Balance of Payments (Billions of Current USD) *1								
Trade Balance	N.A.	0.375	-2.439	-2.776	-10.438	-12.783	-7.607	-5.147
Current Account	N.A.	1.106	-0.560	-0.164	-6.953	-10.823	-6.608	-4.287
Overall Balance	N.A.	0.110	2.130	4.324	10.212	0.474	-8.465	-1.765
Foreign Exchange Rate (VND/USD) *1	6,482.80	14,167.75	15,858.92	15,994.25	16,105.13	16,302.25	17,065.08	18,612.92
Purchasing Power Parity (VND/International Dollar) *1	972.46	4,015.00	4,712.69	4,897.14	5,151.30	6,155.46	6,457.87	7,141.49
Price Indices								
GDP Deflator (1994=100) *3	31.8	161.4	213.5	229.0	247.9	302.8	321.0	359.1
Wholesale Price Index (2005=100)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Consumer Price Index (2005=100)	N.A.	80.3	100.0	107.4	116.3	143.2	153.3	166.9
Growth Rate (%) *3								
Real GDP	5.10	6.79	8.44	8.23	8.46	6.31	5.32	6.78
Population	1.92	1.35	1.17	1.12	1.09	1.07	1.06	1.05
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.	-1.7	8.3	7.4	8.3	23.1	7.1	8.9

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"

: 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 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Primary Energy</b>									
Indigenous Production	310,617	20,630	398,716	9,218	2,087,116	54	306,007	100,648	44,963
Import	42,988	155	78,654	22,897	385,173	31,842	39,190	425,676	266,854
Export	-228,623	-17,154	-228,495	-627	-51,515	-726	-179,938	-17,727	-45,797
International Marine Bunkers	-705	-	-681	-401	-901	-9,428	-	-4,857	-9,005
International Aviation Bunkers	-3,406	-111	-1,070	-513	-2,462	-5,271	-	-5,389	-4,012
Stock Change	3,853	186	5,477	354	-118,007	-3,113	1,721	-384	-2,897
<b>Total</b>	<b>124,725</b>	<b>3,706</b>	<b>252,601</b>	<b>30,928</b>	<b>2,299,404</b>	<b>13,358</b>	<b>166,980</b>	<b>497,966</b>	<b>250,106</b>
<b>Coal &amp; Coal Products</b>									
Indigenous Production	237,339	-	33,800	254	1,691,720	-	161,797	467	959
Import	9	-	7,570	3,809	83,241	6,503	32	114,078	72,949
Export	-190,144	-	-19,718	-	-12,634	-0	-122,304	-533	-
Stock Change	4,169	-	622	500	-103,988	-278	0	584	-438
<b>Total</b>	<b>51,372</b>	<b>-</b>	<b>22,274</b>	<b>4,562</b>	<b>1,658,339</b>	<b>6,225</b>	<b>39,525</b>	<b>114,596</b>	<b>73,469</b>
<b>Crude oil &amp; Petroleum Products</b>									
Indigenous Production	23,752	9,219	165,816	611	203,014	-	58,008	757	698
Import	38,127	155	50,260	15,998	285,944	21,530	39,157	229,415	154,598
Export	-17,586	-8,718	-125,258	-627	-33,490	-498	-26,059	-17,194	-45,797
International Marine Bunkers	-705	-	-681	-401	-901	-9,428	-	-4,857	-9,005
International Aviation Bunkers	-3,406	-111	-1,070	-513	-2,462	-5,271	-	-5,389	-4,012
Stock Change	-316	186	-1,837	-60	-14,019	-3,130	1,721	-953	-1,369
<b>Total</b>	<b>39,867</b>	<b>731</b>	<b>87,230</b>	<b>15,008</b>	<b>438,085</b>	<b>3,202</b>	<b>72,828</b>	<b>201,779</b>	<b>95,113</b>
<b>Natural Gas</b>									
Indigenous Production	42,531	11,410	132,343	1,554	88,303	-	76,638	3,159	485
Import	4,852	-	18,730	3,007	15,511	2,850	-	82,183	39,290
Export	-20,893	-8,436	-79,151	-	-3,752	-	-31,576	-	-
Stock Change	-	-	6,692	-86	-	295	-	-15	-1,090
<b>Total</b>	<b>26,491</b>	<b>2,975</b>	<b>78,615</b>	<b>4,475</b>	<b>100,062</b>	<b>3,145</b>	<b>45,062</b>	<b>85,326</b>	<b>38,685</b>
<b>Nuclear Power</b>									
Indigenous Production	-	-	23,626	-	19,253	-	-	76,188	38,724
<b>Hydro Power</b>									
Indigenous Production	1,077	-	30,237	1,868	62,107	-	1,518	8,197	557
<b>Geothermal, Solar, etc</b>									
Indigenous Production	679	-	835	29	3,837	0	8,047	3,371	199

Primary Energy Supply Table in 2009

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Primary Energy</b>									
Indigenous Production	297,079	19,905	390,818	10,202	1,897,388	65	290,486	94,316	44,413
Import	41,001	109	78,998	21,844	331,685	30,381	37,181	396,200	242,433
Export	-203,520	-17,104	-223,607	-1,122	-49,650	-1,101	-168,980	-19,052	-44,330
International Marine Bunkers	-877	-	-665	-817	-1,130	-9,947	-	-4,985	-8,398
International Aviation Bunkers	-3,119	-86	-787	-439	-4,389	-4,769	-	-5,254	-3,689
Stock Change	-4,591	-145	6,602	-175	-56,060	-1,229	-671	4,257	-1,029
<b>Total</b>	<b>125,973</b>	<b>2,679</b>	<b>251,359</b>	<b>29,493</b>	<b>2,117,844</b>	<b>13,400</b>	<b>158,016</b>	<b>465,483</b>	<b>229,399</b>
<b>Coal &amp; Coal Products</b>									
Indigenous Production	225,706	-	30,724	236	1,557,291	-	150,835	654	1,159
Import	4	-	7,285	3,335	72,637	7,767	40	98,435	62,923
Export	-169,045	-	-16,950	-	-11,866	-0	-116,424	-580	-
Stock Change	-4,335	-	1,158	-49	-49,295	-613	-1,647	150	880
<b>Total</b>	<b>52,330</b>	<b>-</b>	<b>22,217</b>	<b>3,522</b>	<b>1,568,767</b>	<b>7,154</b>	<b>32,805</b>	<b>98,659</b>	<b>64,962</b>
<b>Crude oil &amp; Petroleum Products</b>									
Indigenous Production	25,020	9,301	156,886	721	189,490	-	54,431	798	692
Import	35,441	109	52,820	17,165	251,424	19,318	37,140	221,986	149,277
Export	-16,455	-8,369	-123,092	-1,122	-33,302	-778	-20,376	-18,473	-44,330
International Marine Bunkers	-877	-	-665	-817	-1,130	-9,947	-	-4,985	-8,398
International Aviation Bunkers	-3,119	-86	-787	-439	-4,389	-4,769	-	-5,254	-3,689
Stock Change	-256	-145	819	-142	-6,765	-835	976	4,092	-2,962
<b>Total</b>	<b>39,754</b>	<b>811</b>	<b>85,981</b>	<b>15,366</b>	<b>395,328</b>	<b>2,988</b>	<b>72,172</b>	<b>198,166</b>	<b>90,589</b>
<b>Natural Gas</b>									
Indigenous Production	39,327	10,604	135,378	1,551	79,385	-	77,022	3,326	449
Import	5,557	-	17,066	1,228	7,107	2,293	-	75,778	30,212
Export	-18,020	-8,735	-78,678	-	-2,988	-	-32,180	-	-
Stock Change	-	-	4,625	15	-	219	-	15	1,053
<b>Total</b>	<b>26,864</b>	<b>1,868</b>	<b>78,392</b>	<b>2,794</b>	<b>83,505</b>	<b>2,512</b>	<b>44,842</b>	<b>79,120</b>	<b>31,713</b>
<b>Nuclear Power</b>									
Indigenous Production	-	-	23,478	-	18,277	-	-	71,574	38,509
<b>Hydro Power</b>									
Indigenous Production	950	-	31,713	2,175	52,945	-	954	7,089	485
<b>Geothermal, Solar, etc</b>									
Indigenous Production	538	-	580	7	-	0	7,244	3,556	160

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

Primary Energy Supply Table in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
85,110	226,377	18,423	1,407	16,945	23,188	1,293,080	86	13,625	48,872	1,731,824	51,277	6,788,182
34,254	46,830	7,137	1,796	7,471	21,617	22,887	144,433	117,600	65,621	725,792	13,840	2,502,706
-49,891	-90,527	-4,284	-886	-10,295	-3,883	-601,910	-77,362	-15,841	-12,163	-192,280	-20,838	-1,850,762
-59	-811	-335	-	-	-183	-1,531	-36,387	-1,780	-	-62,639	-	-129,704
-	-2,727	-778	-	-	-989	-6,238	-	-1,979	-3,628	-21,565	-	-60,138
172	-730	-399	15	2,909	-256	-4,620	-	-101	541	6,067	1,630	-107,580
69,587	178,411	19,765	2,333	17,030	39,494	701,668	30,769	111,523	99,243	2,187,199	45,910	7,142,704
1,293	4,839	3,132	-	60	3,510	180,041	-	-	4,586	531,848	24,646	2,880,289
11,188	3,966	133	-	631	5,788	15,310	-	39,106	10,768	11,440	656	387,174
-53	-3	-1,708	-	-70	-2,163	-85,871	-	-78	-13	-48,241	-11,104	-494,638
68	-167	-249	-	113	-104	5,425	-	158	-	7,595	532	-85,459
12,496	8,633	1,307	-	733	7,030	114,905	-	39,186	15,341	502,642	14,730	2,687,366
35,341	160,623	2,745	890	7,115	922	506,545	-	13	17,128	344,921	16,053	1,554,171
18,336	30,392	7,004	1,796	6,757	15,734	3,938	137,859	64,628	42,919	623,479	12,703	1,800,730
-25,663	-89,672	-2,575	-886	-8,073	-1,719	-360,223	-77,362	-15,763	-12,011	-115,256	-9,652	-994,082
-59	-811	-335	-	-	-183	-1,531	-36,387	-1,780	-	-62,639	-	-129,704
-	-2,727	-778	-	-	-989	-6,238	-	-1,979	-3,628	-21,565	-	-60,138
105	-234	-23	15	2,815	-183	-3,325	-	-239	541	-1,971	1,098	-21,177
28,060	97,570	6,038	1,815	8,614	13,582	139,166	24,110	44,880	44,950	766,968	20,203	2,149,800
47,936	41,911	3,855	123	7,626	3,049	540,188	-	237	25,000	495,180	8,123	1,529,651
4,730	12,439	-	-	-	-	3,498	6,573	13,866	11,307	86,918	-	305,752
-24,162	-736	-	-	-2,130	-	-154,175	-	-	-	-26,153	-	-351,161
-	-329	-127	-	-	-	-6,708	-	-20	-	548	-	-839
28,504	53,285	3,728	123	5,496	3,049	382,803	6,573	14,082	36,307	556,493	8,123	1,483,404
-	1,532	-	-	-	-	44,434	-	10,848	-	218,625	-	433,230
540	3,192	2,125	71	1,724	671	14,482	-	626	476	24,625	2,455	156,548
0	5,918	5,389	323	6	8,544	435	-	193	4	25,441	-	63,251

Primary Energy Supply Table in 2009 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
84,469	220,044	16,664	2,749	12,439	23,295	1,186,378	121	13,801	47,134	1,692,571	51,477	6,395,814
24,095	38,714	7,472	1,443	6,803	17,965	24,072	136,636	111,855	62,352	718,788	15,667	2,345,694
-42,772	-81,055	-4,058	-1,943	-4,378	-1,802	-557,489	-73,595	-18,733	-12,622	-161,781	-29,454	-1,718,150
-	-775	-341	-	-	-198	-	-36,387	-1,648	-	-24,076	-	-90,243
-	-2,686	-737	-	-	-976	-5,858	-	-1,754	-3,366	-21,312	-	-59,220
205	437	-168	22	-1,155	269	-186	-	1,046	-1,007	-35,432	1,910	-87,098
65,996	174,680	18,833	2,270	13,708	38,554	646,917	26,775	104,568	92,492	2,168,758	39,600	6,786,796
1,171	5,063	2,643	-	225	2,474	153,640	-	-	5,021	530,133	24,480	2,691,455
7,797	2,967	353	-	553	3,888	14,530	-	36,090	10,269	12,757	508	342,141
-102	-3	-1,478	-	-	-1,052	-68,671	-	-25	-17	-34,866	-13,995	-435,074
164	-280	-56	-	51	-	-4,228	-	850	-829	-23,047	1,652	-79,473
9,030	7,748	1,463	-	829	5,310	95,271	-	36,916	14,444	484,978	12,645	2,519,049
34,771	157,147	2,771	2,018	6,733	962	493,645	-	14	16,188	333,892	17,317	1,502,798
11,967	24,941	7,119	1,443	6,201	14,033	2,601	130,402	64,702	43,580	613,965	14,806	1,720,442
-20,202	-80,357	-2,580	-1,943	-4,373	-749	-351,239	-73,595	-18,708	-12,471	-100,155	-15,427	-948,095
-	-775	-341	-	-	-198	-	-36,387	-1,648	-	-24,076	-	-90,243
-	-2,686	-737	-	-	-976	-5,858	-	-1,754	-3,366	-21,312	-	-59,220
41	782	-24	22	-1,206	269	-1,185	-	258	-178	-5,383	258	-11,562
26,577	99,053	6,208	1,540	7,355	13,342	137,965	20,421	42,865	43,754	796,930	16,954	2,114,118
47,588	38,407	3,595	338	3,510	3,237	474,485	-	281	23,337	479,729	7,101	1,428,649
4,329	10,777	-	-	-	-	6,677	6,233	11,062	8,294	87,033	-	273,647
-22,314	-588	-	-	-	-	-136,038	-	-	-	-24,634	-	-324,175
-	-65	-88	-	-	-	5,270	-	-63	-	-6,748	-	4,234
29,603	48,530	3,507	338	3,510	3,237	350,395	6,233	11,280	31,631	535,380	7,101	1,382,355
-	2,737	-	-	-	-	42,652	-	10,833	-	216,353	-	424,413
574	2,297	2,083	73	1,708	842	15,146	-	693	615	25,663	2,578	148,585
1	6,010	4,507	320	7	8,884	399	-	145	2	23,034	-	55,395

## 3.22.2 Final Energy Consumption Table

Final Energy Consumption Table in 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Total</b>	<b>75,436</b>	<b>981</b>	<b>196,109</b>	<b>23,788</b>	<b>1,355,881</b>	<b>6,693</b>	<b>111,705</b>	<b>328,570</b>	<b>157,213</b>
Coal & Coal Products	3,039	-	2,572	389	541,999	0	19,116	34,620	9,293
Crude oil & Petroleum Products	38,513	664	91,884	12,079	389,977	2,394	63,774	171,527	82,201
Natural Gas	13,153	31	51,931	2,370	66,293	659	16,139	29,990	20,367
Electricity	17,305	286	40,416	4,707	296,693	3,604	12,675	88,778	38,644
Others	3,425	-	9,307	4,242	60,919	37	0	3,656	6,708
<b>Industry</b>	<b>22,408</b>	<b>205</b>	<b>53,298</b>	<b>8,679</b>	<b>848,602</b>	<b>382</b>	<b>47,262</b>	<b>144,863</b>	<b>44,899</b>
Coal & Coal Products	2,884	-	2,568	385	453,879	0	19,116	34,013	8,438
Crude oil & Petroleum Products	3,565	150	7,216	3,020	121,977	95	7,786	57,423	5,902
Natural Gas	7,726	4	22,401	1,100	25,373	22	15,976	15,117	6,872
Electricity	6,443	51	14,286	3,083	205,710	265	4,385	35,835	19,618
Others	1,790	-	6,827	1,091	41,663	0	-	2,476	4,069
<b>Transport</b>	<b>28,775</b>	<b>395</b>	<b>60,122</b>	<b>7,143</b>	<b>166,547</b>	<b>2,145</b>	<b>36,805</b>	<b>80,977</b>	<b>29,950</b>
Coal & Coal Products	123	-	-	-	3,292	-	-	-	-
Crude oil & Petroleum Products	27,893	395	57,333	7,089	147,899	2,084	36,788	79,148	28,738
Natural Gas	431	-	2,464	18	9,040	-	10	-	1,024
Electricity	327	-	324	37	6,317	61	8	1,829	188
Others	-	-	-	-	-	-	-	-	-
<b>Agriculture</b>	<b>2,160</b>	<b>-</b>	<b>4,235</b>	<b>-</b>	<b>32,319</b>	<b>-</b>	<b>-</b>	<b>4,017</b>	<b>1,947</b>
Coal & Coal Products	-	-	-	-	9,726	-	-	-	-
Crude oil & Petroleum Products	1,958	-	2,835	-	14,127	-	-	3,631	1,254
Natural Gas	3	-	593	-	47	-	-	-	4
Electricity	199	-	807	-	8,398	-	-	316	688
Others	-	-	0	-	22	-	-	70	-
<b>Residential &amp; Commercial</b>	<b>17,048</b>	<b>278</b>	<b>56,159</b>	<b>6,653</b>	<b>204,431</b>	<b>4,163</b>	<b>19,504</b>	<b>92,760</b>	<b>40,364</b>
Coal & Coal Products	31	-	3	-	64,100	-	-	607	855
Crude oil & Petroleum Products	896	16	5,189	1,396	43,102	214	11,068	25,372	6,429
Natural Gas	4,150	27	23,490	526	25,002	637	154	14,873	12,467
Electricity	10,336	235	24,998	1,580	55,183	3,278	8,283	50,799	17,973
Others	1,636	-	2,480	3,151	17,044	33	0	1,110	2,639

Final Energy Consumption Table in 2009

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Total</b>	<b>74,505</b>	<b>955</b>	<b>191,015</b>	<b>22,464</b>	<b>1,279,634</b>	<b>6,887</b>	<b>92,182</b>	<b>310,098</b>	<b>147,438</b>
Coal & Coal Products	3,045	-	2,911	210	476,501	0	11,294	31,063	7,772
Crude oil & Petroleum Products	37,920	646	86,025	11,653	350,417	2,623	50,616	166,030	79,941
Natural Gas	12,733	30	51,921	1,468	136,593	651	18,688	27,389	18,122
Electricity	17,456	279	40,008	4,647	261,801	3,572	11,584	82,297	34,890
Others	3,351	-	10,150	4,486	54,322	41	-	3,318	6,712
<b>Industry</b>	<b>21,947</b>	<b>209</b>	<b>51,448</b>	<b>8,166</b>	<b>794,561</b>	<b>636</b>	<b>37,124</b>	<b>132,627</b>	<b>39,930</b>
Coal & Coal Products	2,884	-	2,908	200	384,394	0	11,294	30,518	6,879
Crude oil & Petroleum Products	3,243	161	6,211	3,169	94,158	308	6,347	54,376	5,831
Natural Gas	7,529	-	20,573	153	102,837	22	15,509	13,018	5,632
Electricity	6,553	48	13,934	3,147	177,389	270	3,974	32,607	17,142
Others	1,737	-	7,822	1,498	35,783	37	-	2,109	4,446
<b>Transport</b>	<b>28,662</b>	<b>352</b>	<b>58,009</b>	<b>6,893</b>	<b>149,602</b>	<b>2,155</b>	<b>30,729</b>	<b>78,863</b>	<b>29,302</b>
Coal & Coal Products	127	-	-	-	4,208	-	-	-	-
Crude oil & Petroleum Products	27,756	352	54,955	6,836	132,489	2,095	30,711	77,061	28,220
Natural Gas	426	-	2,722	20	7,598	-	8	-	895
Electricity	354	-	332	36	5,306	60	10	1,802	187
Others	-	-	-	-	-	-	-	-	-
<b>Agriculture</b>	<b>2,111</b>	<b>0</b>	<b>3,717</b>	<b>-</b>	<b>29,799</b>	<b>-</b>	<b>-</b>	<b>4,023</b>	<b>1,774</b>
Coal & Coal Products	-	-	-	-	8,329	-	-	-	-
Crude oil & Petroleum Products	1,911	0	2,385	-	13,367	-	-	3,655	1,145
Natural Gas	3	-	514	-	-	-	-	-	4
Electricity	197	-	818	-	8,083	-	-	294	626
Others	-	-	1	-	20	-	-	74	-
<b>Residential &amp; Commercial</b>	<b>16,953</b>	<b>212</b>	<b>57,790</b>	<b>6,245</b>	<b>201,405</b>	<b>4,096</b>	<b>15,369</b>	<b>88,746</b>	<b>37,853</b>
Coal & Coal Products	35	-	3	3	69,338	-	-	545	893
Crude oil & Petroleum Products	897	18	5,402	1,283	39,608	220	7,648	25,101	6,328
Natural Gas	4,056	26	25,132	522	23,956	630	121	14,371	11,591
Electricity	10,352	168	24,925	1,450	51,677	3,242	7,600	47,595	16,775
Others	1,613	-	2,328	2,988	16,826	4	-	1,135	2,267

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

Final Energy Consumption Table in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
40,290	113,453	12,775	1,431	12,518	23,559	445,819	19,942	68,090	61,648	1,469,716	35,992	4,561,611
1,563	1,626	599	-	599	1,933	19,345	-	6,915	7,929	23,199	9,893	684,629
24,383	73,858	5,887	1,155	8,067	11,727	103,767	16,316	40,170	35,853	747,331	18,131	1,939,659
5,355	12,746	1,658	-	1,135	72	143,229	119	2,124	5,053	319,163	493	692,081
8,989	17,876	3,380	277	2,717	4,753	62,495	3,507	18,777	12,813	326,965	7,476	973,133
-	7,346	1,251	-	-	5,074	116,984	-	103	-	53,057	-	272,110
12,041	27,415	3,895	883	3,688	6,045	132,036	10,986	22,476	18,381	270,601	14,926	1,693,970
1,563	1,626	510	-	599	1,933	15,244	-	6,915	7,929	21,691	8,306	587,598
2,795	5,842	347	682	940	1,431	11,446	9,481	3,869	2,817	24,394	2,127	273,305
3,691	9,016	801	-	704	71	32,366	70	1,014	2,191	111,346	493	256,354
3,992	9,901	1,221	201	1,445	1,598	28,109	1,436	10,677	5,444	75,630	4,000	433,329
-	1,030	1,015	-	-	1,012	44,873	-	-	-	37,540	-	143,384
16,780	51,846	4,610	421	6,048	8,097	96,490	6,586	11,854	21,194	576,123	11,164	1,224,073
-	-	1	-	-	-	-	-	-	-	-	-	3,416
16,551	51,732	4,600	421	5,681	8,087	56,298	6,586	11,754	19,576	559,229	11,164	1,139,046
211	12	1	-	367	0	32,858	-	-	1,612	16,230	-	64,277
18	102	9	-	-	10	7,334	-	100	6	663	-	17,334
-	-	-	-	-	-	-	-	-	-	-	-	-
1,072	3,523	526	-	81	135	8,070	4	152	3,532	12,554	607	74,935
-	-	43	-	-	-	73	-	-	-	-	-	20
1,048	2,784	287	-	33	22	2,976	-	4	3,504	12,181	507	47,150
-	-	32	-	-	-	553	-	-	-	-	-	1,231
24	740	147	-	48	112	1,349	4	148	29	-	81	13,090
-	-	17	-	-	-	3,119	-	-	-	373	-	3,601
6,941	21,417	2,660	-	2,236	8,953	148,504	2,115	11,209	10,138	467,721	6,539	1,129,795
-	-	45	-	-	-	4,022	-	-	-	1,509	1,568	72,741
1,955	8,091	196	-	974	1,872	6,381	-	2,221	2,871	30,224	1,577	150,044
31	966	276	-	56	-	43,464	49	1,110	1	182,128	-	309,406
4,955	6,043	1,924	-	1,206	3,018	25,678	2,067	7,775	7,266	238,717	3,394	474,708
-	6,317	219	-	-	4,063	68,958	-	103	-	15,144	-	122,897

Final Energy Consumption Table in 2009 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
38,244	110,102	12,446	1,162	12,067	22,926	418,200	16,114	63,990	59,503	1,473,221	32,071	4,385,221
1,378	1,087	537	-	580	1,624	18,268	-	5,926	7,187	21,217	8,966	599,567
22,757	72,502	5,817	889	8,157	11,373	101,556	12,771	38,789	35,866	775,737	15,851	1,887,935
5,826	11,805	1,666	-	769	71	128,542	113	1,833	4,822	312,081	639	735,762
8,283	17,294	3,271	273	2,561	4,377	59,016	3,230	17,341	11,628	313,229	6,616	903,653
-	7,414	1,154	-	-	5,481	110,817	-	102	-	50,956	-	258,304
13,419	25,840	3,688	629	3,941	5,826	119,860	8,163	19,978	17,873	256,795	13,724	1,576,386
1,378	1,087	469	-	580	1,624	13,711	-	5,926	7,187	19,629	7,506	498,174
4,433	6,183	392	430	1,470	1,340	10,841	6,943	3,798	3,467	27,580	2,146	242,827
3,891	8,247	783	-	489	70	29,407	48	820	2,346	105,719	639	317,733
3,717	9,288	1,132	199	1,401	1,469	26,782	1,172	9,434	4,874	68,720	3,434	386,685
-	1,035	913	-	-	1,322	39,119	-	-	-	35,146	-	130,967
16,066	50,474	4,575	404	5,464	7,962	89,617	5,578	11,480	20,932	592,409	10,274	1,199,803
-	-	0	-	-	-	-	-	-	-	-	-	4,336
15,853	50,365	4,565	404	5,245	7,952	55,017	5,578	11,385	19,647	577,153	10,274	1,123,915
202	13	1	-	220	0	27,617	-	-	1,280	14,585	-	55,586
11	96	9	-	-	10	6,984	-	95	5	671	-	15,967
-	-	-	-	-	-	-	-	-	-	-	-	-
210	3,597	529	-	30	129	8,343	4	147	3,504	14,375	599	72,890
-	-	19	-	-	-	93	-	-	-	-	21	8,462
189	2,797	305	-	30	22	3,050	-	4	3,476	14,033	518	46,887
-	-	42	-	-	-	884	-	-	-	-	-	1,446
21	800	146	-	-	107	1,299	4	143	27	-	60	12,626
-	-	17	-	-	-	3,017	-	-	-	341	-	3,470
4,966	21,250	2,641	-	2,104	8,700	147,445	2,118	11,034	9,620	468,917	6,060	1,113,525
-	-	48	-	-	-	4,461	-	-	-	1,588	1,439	78,353
408	7,903	160	-	909	1,764	6,082	-	2,329	2,957	38,097	1,499	148,614
23	896	294	-	36	-	44,334	65	1,013	0	182,796	-	309,860
4,534	6,073	1,915	-	1,160	2,777	23,929	2,053	7,590	6,662	230,967	3,122	454,565
-	6,379	224	-	-	4,159	68,640	-	102	-	15,469	-	122,133



## 3.22.3 Demand and Supply Table

**Demand & Supply Table of Coal in 2009**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	225,706	-	30,724	236	1,557,291	-	150,835	654	1,159
Import	-	-	7,058	3,335	72,637	7,767	40	98,216	62,744
Export	-169,045	-	-16,799	-	-11,866	-0	-116,424	-	-
Stock Change	-4,200	-	1,158	-49	-34,029	-613	-1,647	150	880
Primary Energy Supply	52,462	-	22,140	3,522	1,584,033	7,154	32,805	99,019	64,783
Main Activity Producer	-46,415	-	-18,697	-3,320	-713,784	-7,154	-21,503	-43,966	-43,601
Autoproducers	-	-	-2	-	-68,894	-	-	-8,939	-2,027
Coal Transformation	-2,908	-	-2,065	-404	-253,244	-	-36	-33,717	-15,893
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-	-	-	-	-6,645	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Final Energy Consumption	2,232	-	1,828	134	412,577	0	11,265	12,546	4,010

**Demand & Supply Table of Crude Oil in 2009**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	25,020	9,301	156,886	721	189,490	-	54,431	798	692
Import	19,876	17	40,797	10,221	203,653	-	18,284	182,823	117,637
Export	-13,911	-8,369	-102,296	-	-5,073	-	-20,376	-	-325
Stock Change	41	-143	193	-87	-6,765	-	976	2,189	-2,998
Primary Energy Supply	31,026	806	95,579	10,855	381,305	-	53,316	185,809	115,006
Main Activity Producer	-	-	-	-	-	-	-	-3,352	-
Autoproducers	-	-	-	-	-64	-	-	-	-
Coal Transformation	-	-	-	-	-	-	-	-	-
Refining	-33,084	-769	-96,031	-11,915	-371,094	-	-50,975	-181,832	-122,646
Gas processing	-	-	-	-	-	-	-	-	-
Other Transformation	234	-	790	-	-	-	-	-	8,005
Final Energy Consumption	16	-	-	-	3,385	-	-	-	-

**Demand & Supply Table of Natural Gas in 2009**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	39,327	10,604	135,378	1,551	79,385	-	77,022	3,326	449
Import	5,557	-	17,066	1,228	7,107	2,293	-	75,778	30,212
Export	-18,020	-8,735	-78,678	-	-2,988	-	-32,180	-	-
Stock Change	-	-	4,625	15	-	219	-	15	1,053
Primary Energy Supply	26,864	1,868	78,392	2,794	83,505	2,512	44,842	79,120	31,713
Main Activity Producer	-6,644	-1,099	-6,641	-726	-368	-1,861	-8,674	-49,089	-11,987
Autoproducers	-1,316	-886	-2,970	-31	-20,253	-	-	-3,119	-407
Coal Transformation	-68	-	-	-	-	-	-	-	-
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-264	521	-1,962	135	88,590	-	-6,406	971	224
Other Transformation	-	-	-586	-	-	-	-	-	-
Final Energy Consumption	12,733	30	51,921	1,468	136,593	651	18,688	27,389	18,122

Demand &amp; Supply Table of Coal in 2009 (Continued)

													ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total	
1,171	5,063	2,643	-	225	2,474	153,640	-	-	5,021	530,133	24,480	2,691,455	
7,797	2,835	353	-	531	3,888	14,379	-	36,018	4,915	12,540	448	335,503	
-102	-3	-1,478	-	-	-1,052	-67,384	-	-	-1	-34,049	-13,995	-432,199	
164	-73	-56	-	42	-	-4,309	-	850	-2	-23,134	1,652	-63,214	
9,030	7,823	1,463	-	799	5,310	96,326	-	36,868	9,933	485,490	12,585	2,531,545	
-7,698	-6,341	-623	-	-258	-4,442	-51,348	-	-22,158	-6,687	-436,870	-3,560	-1,438,427	
-	-	-8	-	-	-	-15,582	-	-6,278	-562	-2,503	-119	-104,915	
-	-1,370	-373	-	-	-	-33,788	-	-3,984	-	-10,843	-	-358,625	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-1,944	-	-8,589	
-	-	-	-	-	-	-	-	-	-	-	-	-	
1,378	112	501	-	550	1,624	5,702	-	4,667	2,676	19,847	8,906	490,556	

Demand &amp; Supply Table of Crude Oil in 2009 (Continued)

													ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total	
34,771	157,147	2,771	2,018	6,733	962	493,645	-	14	16,188	333,892	17,317	1,502,798	
5,787	502	4,895	753	5,024	6,772	1,793	44,136	49,643	43,148	535,092	-	1,290,853	
-12,378	-70,207	-2,370	-1,943	-1,011	-257	-250,143	-45	-	-2,261	-8,975	-13,614	-513,554	
41	453	-55	69	45	428	-1,635	-	351	935	-1,710	-1,008	-8,681	
28,222	87,896	5,240	897	10,792	7,905	243,659	44,091	50,008	58,010	858,298	2,696	2,271,416	
-	-	-	-	-	-	-	-	-	-	-	-	-3,352	
-	-	-	-	-	-	-752	-	-	-	-	-	-816	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-26,505	-76,517	-5,220	-825	-9,571	-6,940	-240,252	-44,091	-50,159	-49,252	-829,799	-1,972	-2,209,450	
-	-	-	-	-	-	-	-	-	-	-	-	-	
142	-	2	-	-	114	-	-	-	-	20,490	-	29,777	
-	-	-	4	-	-	41	-	-	5,119	2,811	-	11,376	

Demand &amp; Supply Table of Natural Gas in 2009 (Continued)

													ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total	
47,588	38,407	3,595	338	3,510	3,237	474,485	-	281	23,337	479,729	7,101	1,428,649	
4,329	10,777	-	-	-	-	6,677	6,233	11,062	8,294	87,033	-	273,647	
-22,314	-588	-	-	-	-	-136,038	-	-	-	-24,634	-	-324,175	
-	-65	-88	-	-	-	5,270	-	-63	-	-6,748	-	4,234	
29,603	48,530	3,507	338	3,510	3,237	350,395	6,233	11,280	31,631	535,380	7,101	1,382,355	
-11,467	-20,891	-1,495	-	-2,014	-3,064	-128,839	-6,233	-7,985	-20,307	-159,754	-6,243	-455,381	
-1,186	-2,842	-36	-118	-85	-	-75,391	-	-115	-2,444	-12,931	-219	-124,348	
-	-	-	-	-	-	-	-	-	-	-	-	-68	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-6,522	613	-	-	-	-	-	113	-1,423	-	1,244	-	75,834	
-	-	-	-	-	-	-1,390	-	-	-	-	-	-1,976	
5,826	11,805	1,666	-	769	71	128,542	113	1,833	4,822	312,081	639	735,762	

**Demand & Supply Table of Coal in 2010**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	237,339	-	33,800	254	1,691,720	-	161,797	467	959
Import	-	-	7,078	3,808	83,167	6,503	32	113,557	72,508
Export	-190,144	-	-19,664	-	-10,356	-0	-122,304	-	-
Stock Change	4,233	-	622	529	-92,907	-278	0	584	-438
Primary Energy Supply	51,427	-	21,836	4,591	1,671,623	6,225	39,525	114,608	73,029
Main Activity Producer	-44,951	-	-18,948	-3,856	-730,777	-6,224	-20,233	-48,103	-46,251
Autoproducers	-	-	-2	-	-118,643	-	-	-10,423	-2,505
Coal Transformation	-3,361	-	-2,626	-348	-272,416	-	-	-38,268	-19,557
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-	-	-	-	-5,744	-	-	-	-
Other Transformation	-	-	-	-	-	-	-	-	-
Final Energy Consumption	2,127	-	1,411	332	467,133	0	19,116	14,651	4,406

**Demand & Supply Table of Crude Oil in 2010**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	23,752	9,219	165,816	611	203,014	-	58,008	757	698
Import	22,321	14	39,320	8,659	237,682	-	15,455	185,869	121,570
Export	-15,150	-8,718	-104,795	-	-3,030	-	-20,558	-	-481
Stock Change	-432	183	-1,530	-3	-8,900	-	-	-1,190	-795
Primary Energy Supply	30,491	698	98,812	9,267	428,766	-	52,904	185,437	120,992
Main Activity Producer	-	-	-	-	-37	-	-	-3,523	-
Autoproducers	-	-	-	-	-33	-	-	-	-
Coal Transformation	-	-	-	-	-	-	-	-	-
Refining	-32,254	-733	-97,939	-9,894	-418,694	-	-49,087	-181,505	-126,123
Gas processing	-	-	-	-	-	-	-	-	-
Other Transformation	279	-	1,109	-	-	-	-	-	7,338
Final Energy Consumption	13	-	-	-	3,235	-	-	-	-

**Demand & Supply Table of Natural Gas in 2010**

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Indigenous Production	42,531	11,410	132,343	1,554	88,303	-	76,638	3,159	485
Import	4,852	-	18,730	3,007	15,511	2,850	-	82,183	39,290
Export	-20,893	-8,436	-79,151	-	-3,752	-	-31,576	-	-
Stock Change	-	-	6,692	-86	-	295	-	-15	-1,090
Primary Energy Supply	26,491	2,975	78,615	4,475	100,062	3,145	45,062	85,326	38,685
Main Activity Producer	-7,125	-1,153	-8,269	-1,718	-16,137	-2,487	-7,123	-51,089	-17,570
Autoproducers	-1,271	-150	-3,246	-34	-3,795	-	-1,650	-3,222	-435
Coal Transformation	-76	-	-	-	-	-	-	-	-
Refining	-	-	-	-	-	-	-	-	-
Gas processing	-262	-430	-1,933	-8	1,149	-	-12,727	1,138	365
Other Transformation	-	-	-800	-	-	-	-	-	-
Final Energy Consumption	13,153	31	51,931	2,370	66,293	659	16,139	29,990	20,367

Demand &amp; Supply Table of Coal in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
1,293	4,839	3,132	-	60	3,510	180,041	-	-	4,586	531,848	24,646	2,880,289
11,188	3,718	133	-	589	5,788	15,174	-	38,977	4,476	10,682	576	377,954
-53	-3	-1,708	-	-70	-2,163	-84,285	-	-	-1	-47,327	-11,031	-489,110
68	-115	-249	-	109	-104	5,424	-	158	-	7,549	532	-74,285
12,496	8,439	1,307	-	688	7,030	116,354	-	39,134	9,062	502,752	14,723	2,694,848
-11,084	-6,810	-310	-	-257	-5,090	-40,629	-	-22,047	-6,315	-458,840	-4,720	-1,475,443
-	-	-8	-	-	-	-16,269	-	-6,011	-505	-3,638	-117	-158,121
-	-1,513	-416	-	-	-	-36,050	-	-5,524	-	-14,831	-	-394,912
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-1,919	-	-7,663
-	-	-	-	-	-	-	-	-	-	-	-	-
1,563	115	558	-	553	1,933	5,333	-	5,259	1,285	21,164	9,886	556,825

Demand &amp; Supply Table of Crude Oil in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
35,341	160,623	2,745	890	7,115	922	506,545	-	13	17,128	344,921	16,053	1,554,171
7,985	399	5,233	972	4,881	9,095	1,105	41,211	46,059	42,757	540,002	-	1,330,588
-17,247	-80,005	-2,453	-886	-968	-862	-248,268	-39	-	-1,587	-9,997	-8,121	-523,166
-336	-131	-43	-25	120	-100	-2,455	-	-157	-	-1,429	-499	-17,720
25,743	80,886	5,482	952	11,147	9,054	256,927	41,172	45,915	58,297	873,497	7,434	2,343,873
-	-	-	-	-	-	-	-	-	-	-	-	-3,560
-	-	-	-	-	-	-787	-	-	-	-	-	-820
-	-	-	-	-	-	-	-	-	-	-	-	-
-22,645	-73,827	-5,364	-948	-10,435	-8,733	-251,180	-41,172	-46,059	-49,224	-842,408	-5,606	-2,273,830
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	4	-	48	83	-	-	-	802	23,593	-	33,256
-	-	-	4	-	-	110	-	-	5,530	3,563	-	12,455

Demand &amp; Supply Table of Natural Gas in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
47,936	41,911	3,855	123	7,626	3,049	540,188	-	237	25,000	495,180	8,123	1,529,651
4,730	12,439	-	-	-	-	3,498	6,573	13,866	11,307	86,918	-	305,752
-24,162	-736	-	-	-2,130	-	-154,175	-	-	-	-26,153	-	-351,161
-	-329	-127	-	-	-	-6,708	-	-20	-	548	-	-839
28,504	53,285	3,728	123	5,496	3,049	382,803	6,573	14,082	36,307	556,493	8,123	1,483,404
-14,559	-22,491	-1,710	-	-2,969	-2,859	-139,983	-6,573	-10,361	-22,510	-171,238	-7,378	-515,303
-883	-2,819	-36	-118	-160	-	-82,602	-	-111	-2,473	-13,849	-253	-117,106
-	-	-	-	-	-	-	-	-	-	-	-	-76
-	-	-	-	-	-	-	-	-	-	-	-	-
-2,423	636	-	-	-	-	-0	113	-1,067	-	1,272	-	-14,179
-4,685	-	-	-	-	-	-1,677	-	-	-	-	-	-7,163
5,355	12,746	1,658	-	1,135	72	143,229	119	2,124	5,053	319,163	493	692,081

## 3.22.4 Power Generation Table

Power Generation Table in 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Total</b>	<b>241,584</b>	<b>3,792</b>	<b>607,952</b>	<b>60,434</b>	<b>4,207,160</b>	<b>38,333</b>	<b>169,786</b>	<b>1,156,010</b>	<b>499,406</b>
Thermal	220,081	3,792	147,253	36,026	3,331,928	38,290	142,657	728,394	341,395
Coal	180,697	-	87,935	16,866	3,242,177	27,244	68,115	345,269	219,276
Oil	3,161	38	7,397	8,470	17,301	163	33,708	100,448	18,935
Gas	36,223	3,754	51,921	10,690	72,450	10,883	40,835	282,678	103,184
Hydro	12,522	-	351,591	21,717	722,172	-	17,677	95,314	6,472
Nuclear	-	-	90,659	-	73,880	-	-	292,355	148,596
Geothermal	-	-	-	-	-	-	9,357	2,706	-
Others	8,981	-	18,449	2,691	79,180	43	95	37,241	2,943
<b>Main Activity Producer</b>	<b>231,696</b>	<b>3,440</b>	<b>558,520</b>	<b>56,760</b>	<b>3,805,192</b>	<b>38,292</b>	<b>169,786</b>	<b>928,963</b>	<b>470,924</b>
Thermal	213,101	3,440	133,688	34,859	2,929,960	38,290	142,657	552,353	313,773
Coal	180,547	-	87,930	16,866	2,848,462	27,244	68,115	248,662	199,701
Oil	1,093	38	5,448	7,400	16,625	163	33,708	45,118	13,168
Gas	31,461	3,402	40,310	10,593	64,874	10,883	40,835	258,573	100,904
Hydro	12,522	-	324,385	21,381	722,172	-	17,677	79,276	6,472
Nuclear	-	-	90,659	-	73,880	-	-	292,355	148,596
Geothermal	-	-	-	-	-	-	9,357	2,534	-
Others	6,073	-	9,788	520	79,180	1	95	2,446	2,083
<b>Autoproducers</b>	<b>9,888</b>	<b>352</b>	<b>49,432</b>	<b>3,674</b>	<b>401,968</b>	<b>41</b>	<b>-</b>	<b>227,047</b>	<b>28,482</b>
Thermal	6,980	352	13,565	1,167	401,968	-	-	176,042	27,622
Coal	150	-	5	-	393,715	-	-	96,607	19,575
Oil	2,068	-	1,949	1,070	677	-	-	55,330	5,767
Gas	4,762	352	11,611	97	7,577	-	-	24,105	2,280
Hydro	-	-	27,206	336	-	-	-	16,038	-
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	172	-
Others	2,908	-	8,661	2,171	-	41	-	34,795	860

Power Generation Table in 2009

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Total</b>	<b>244,417</b>	<b>3,611</b>	<b>614,047</b>	<b>60,722</b>	<b>3,714,650</b>	<b>38,872</b>	<b>152,018</b>	<b>1,093,787</b>	<b>454,504</b>
Thermal	225,426	3,611	140,684	30,976	2,982,780	38,728	132,453	702,802	298,953
Coal	203,334	-	91,642	14,897	2,871,333	38,728	63,218	315,673	208,864
Oil	2,639	-	8,299	12,936	71,480	-	31,900	115,310	19,811
Gas	35,854	3,611	37,495	3,871	39,967	-	37,334	271,804	70,278
Hydro	11,052	-	368,759	25,296	615,640	-	11,095	82,432	5,641
Nuclear	-	-	90,092	-	70,134	-	-	274,651	147,771
Geothermal	-	-	-	-	-	-	8,423	2,901	-
Others	7,939	-	14,512	4,450	46,096	144	47	31,001	2,139
<b>Main Activity Producer</b>	<b>244,384</b>	<b>3,071</b>	<b>590,877</b>	<b>55,620</b>	<b>3,243,607</b>	<b>40,501</b>	<b>149,437</b>	<b>986,889</b>	<b>420,329</b>
Thermal	218,272	3,269	127,596	30,069	2,740,877	38,728	132,453	556,500	275,514
Coal	203,259	-	91,575	14,897	2,689,896	38,728	63,218	244,048	193,196
Oil	1,858	-	6,221	12,133	50,980	-	31,900	61,050	14,214
Gas	25,165	3,269	30,600	3,826	-	-	37,334	251,402	68,104
Hydro	11,052	-	337,014	24,799	615,640	-	11,095	73,590	5,641
Nuclear	-	-	90,092	-	70,134	-	-	274,651	147,771
Geothermal	-	-	-	-	-	-	8,423	2,704	-
Others	5,048	-	6,816	318	46,096	1	47	2,576	1,692
<b>Autoproducers</b>	<b>10,045</b>	<b>343</b>	<b>52,529</b>	<b>5,536</b>	<b>241,903</b>	<b>143</b>	<b>-</b>	<b>183,765</b>	<b>23,886</b>
Thermal	7,154	343	13,088	907	241,903	-	-	146,302	23,439
Coal	75	-	67	-	181,437	-	-	71,625	15,668
Oil	781	-	2,078	803	20,499	-	-	54,260	5,597
Gas	10,689	343	6,895	45	39,967	-	-	20,401	2,174
Hydro	-	-	31,745	497	-	-	-	8,843	-
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	196	-
Others	2,891	-	7,696	4,132	-	143	-	28,424	447

Power Generation Table in 2010 (Continued)

												GWh
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
113,789	270,968	44,819	3,500	35,907	67,743	1,038,030	45,368	247,033	144,362	4,378,422	95,523	13,468,439
106,776	217,391	11,920	2,176	15,122	49,920	695,935	44,919	191,762	138,817	3,060,149	66,981	9,590,203
43,756	32,536	2,068	-	857	23,301	166,094	-	120,543	28,207	1,994,194	15,878	6,615,012
2,662	43,879	2	1,633	2,028	7,101	9,312	10,455	10,548	1,156	48,086	6,578	333,060
60,358	140,976	9,850	543	12,237	19,518	520,529	34,464	60,671	109,454	1,017,869	44,525	2,643,613
6,272	37,121	24,714	987	20,052	7,803	168,397	-	7,255	5,537	286,333	28,542	1,820,478
-	5,879	-	-	-	-	170,415	-	41,629	-	838,931	-	1,662,344
-	6,618	5,883	337	-	9,929	505	-	-	2	17,577	-	52,914
741	3,959	2,302	-	733	90	2,778	449	6,387	6	175,432	-	342,500
109,288	242,537	43,418	960	33,546	67,743	976,126	45,368	208,897	144,362	4,214,470	92,410	12,442,698
103,016	193,135	11,112	334	13,896	49,920	637,713	44,919	158,998	138,817	2,937,991	63,868	8,715,840
43,756	31,938	1,391	-	857	23,301	154,560	-	91,456	28,207	1,969,153	15,878	6,038,025
1,824	37,752	2	334	1,379	7,101	5,402	10,455	8,255	1,156	39,782	3,465	239,666
57,436	123,445	9,719	-	11,660	19,518	477,751	34,464	59,287	109,454	929,056	44,525	2,438,149
6,272	36,739	24,701	627	19,567	7,803	167,489	-	7,255	5,537	284,550	28,542	1,772,967
-	5,879	-	-	-	-	170,415	-	41,629	-	838,931	-	1,662,344
-	6,618	5,829	-	-	9,929	505	-	-	2	17,577	-	52,351
-	166	1,776	-	83	90	4	449	1,015	6	135,421	-	239,197
4,501	28,431	1,401	2,539	2,361	-	61,904	-	38,136	-	163,952	3,113	1,025,741
3,760	24,256	808	1,842	1,226	-	58,222	-	32,764	-	122,158	3,113	874,363
-	598	677	-	-	-	11,534	-	29,086	-	25,041	-	576,987
838	6,127	-	1,299	649	-	3,910	-	2,293	-	8,304	3,113	93,394
2,922	17,531	131	543	577	-	42,778	-	1,384	-	88,813	-	205,464
-	382	13	360	485	-	908	-	-	-	1,783	-	47,511
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	54	337	-	-	-	-	-	-	-	-	563
741	3,793	526	-	650	-	2,774	-	5,372	-	40,011	-	103,303

Power Generation Table in 2009 (Continued)

												GWh
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
107,105	261,018	43,454	3,445	33,029	61,921	991,980	41,801	229,691	148,297	4,188,214	79,498	12,566,080
98,987	213,738	12,238	2,219	12,475	41,744	649,167	41,155	174,558	126,298	2,892,882	49,480	8,871,354
36,250	29,522	3,295	-	929	16,476	164,112	-	118,683	28,020	1,892,661	12,836	6,110,474
2,813	45,745	9	1,676	2,350	5,381	16,021	7,979	8,698	683	50,445	2,378	406,551
59,924	138,471	8,972	543	9,196	19,887	469,034	33,176	47,178	97,595	949,776	34,267	2,368,232
6,671	26,713	24,219	854	19,864	9,788	176,118	-	7,054	7,148	298,410	29,981	1,726,735
-	10,501	-	-	-	-	163,584	-	41,571	-	830,210	-	1,628,514
-	6,740	4,865	372	-	10,324	464	-	-	1	17,046	-	51,136
1,447	3,326	2,132	-	690	66	2,647	645	6,509	14,850	149,666	37	288,342
105,852	235,872	42,182	726	30,622	60,821	984,142	41,717	201,445	132,781	4,215,215	69,026	11,855,116
92,478	191,171	11,510	276	11,260	41,744	600,378	41,155	143,039	126,298	2,782,558	47,014	8,212,158
36,250	29,059	2,705	-	929	16,476	153,526	-	90,691	28,020	1,873,706	12,420	5,782,600
2,406	40,381	9	276	1,505	5,381	12,144	7,979	6,126	683	41,384	1,050	297,681
53,822	121,731	8,500	-	8,826	19,887	434,708	33,176	46,221	97,595	867,468	33,544	2,145,177
6,671	26,445	24,207	494	19,392	9,788	175,186	-	7,054	7,148	296,433	29,981	1,681,629
-	10,501	-	-	-	-	163,584	-	41,571	-	830,210	-	1,628,514
-	6,740	4,811	-	-	10,324	464	-	-	1	17,046	-	50,513
222	249	1,609	-	-	66	4	645	778	2	112,766	-	178,936
7,734	25,912	1,317	2,675	2,377	-	52,364	-	37,249	14,848	149,201	2,503	814,330
6,509	22,567	728	1,943	1,215	-	48,789	-	31,519	-	110,324	2,466	659,196
-	463	590	-	-	-	10,586	-	27,991	-	18,955	416	327,874
407	5,364	-	1,400	844	-	3,877	-	2,571	-	9,061	1,327	108,870
6,102	16,740	472	543	371	-	34,326	-	956	-	82,308	723	223,055
-	268	12	360	472	-	932	-	-	-	1,977	-	45,106
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	54	372	-	-	-	-	-	-	-	-	622
1,225	3,077	523	-	690	-	2,643	-	5,730	14,848	36,900	37	109,406

## 3.22.5 Fuel Consumption Table for Power Generation

Fuel Consumption Table for Power Generation in 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Main Activity Producer	52,859	1,163	28,495	7,193	772,701	8,748	35,816	114,657	67,946
Coal	44,951	-	18,948	3,856	730,777	6,224	20,233	48,103	46,251
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	1,219	-	-	1,128	227
Blast Furnace Gas	-	-	-	-	-	-	-	3,110	385
Crude Oil & NGL	-	-	-	-	37	-	-	3,514	-
LPG	-	-	-	-	-	-	-	292	-
Refinery Gas	-	-	-	-	814	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Diesel Oil	181	10	153	1,228	1,161	14	5,983	139	33
Fuel Oil	118	-	604	91	2,044	23	2,445	6,015	3,250
Natural Gas	7,125	1,153	8,269	1,718	16,137	2,487	7,123	51,089	17,570
Others	483	-	522	300	20,512	-	32	1,270	231
Autoproducers	3,195	150	5,857	506	145,292	3	1,650	32,966	8,121
Coal	-	-	2	-	118,643	-	-	10,423	2,505
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	5,972	-	-	594	306
Blast Furnace Gas	32	-	-	-	10,890	-	-	2,737	2,249
Crude Oil & NGL	-	-	-	-	33	-	-	-	-
LPG	-	-	-	-	11	-	-	93	-
Refinery Gas	-	-	312	-	1,934	-	-	1,346	-
Naphtha	-	-	-	-	-	-	-	1,559	1,693
Diesel Oil	539	-	80	32	39	-	-	1,051	-
Fuel Oil	16	-	105	106	1,208	-	-	4,058	-
Natural Gas	1,271	150	3,246	34	3,795	-	1,650	3,222	435
Others	1,336	-	2,111	334	2,769	3	-	7,883	933

Fuel Consumption Table for Power Generation in 2009

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
Main Activity Producer	53,991	1,108	27,238	6,358	714,699	9,060	38,382	109,583	59,339
Coal	46,415	-	18,697	3,320	713,784	7,154	21,503	43,966	43,601
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	547	-	-	977	-
Blast Furnace Gas	-	-	-	-	-	-	-	2,391	-
Crude Oil & NGL	-	-	-	-	-	-	-	3,322	-
LPG	-	-	-	11	-	-	-	518	-
Refinery Gas	-	-	-	-	-	-	-	-	-
Naphtha	-	-	-	-	-	-	-	-	-
Gas/Diesel Oil	307	9	160	1,868	-	17	5,137	168	20
Fuel Oil	134	-	1,153	126	-	28	3,051	7,799	3,520
Natural Gas	6,644	1,099	6,641	726	368	1,861	8,674	49,089	11,987
Others	491	-	587	308	-	-	17	1,354	211
Autoproducers	3,575	886	5,307	893	101,833	12	-	29,633	6,616
Coal	-	-	2	-	68,894	-	-	8,939	2,027
Coke	-	-	-	-	-	-	-	-	-
Coke Oven Gas	-	-	-	-	3,719	-	-	531	237
Blast Furnace Gas	23	-	-	-	-	-	-	1,982	1,865
Crude Oil & NGL	-	-	-	-	64	-	-	-	-
LPG	-	-	-	1	13	-	-	96	-
Refinery Gas	-	-	307	-	2,669	-	-	1,188	-
Naphtha	-	-	-	-	-	-	-	1,389	1,362
Gas/Diesel Oil	508	-	71	70	1,548	-	-	1,698	-
Fuel Oil	18	-	66	97	2,937	-	-	3,972	23
Natural Gas	1,316	886	2,970	31	20,253	-	-	3,119	407
Others	1,710	-	1,892	694	1,735	12	-	6,719	695

Fuel Consumption Table for Power Generation in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
26,183	38,055	2,056	125	3,702	9,452	182,190	8,653	34,377	29,083	667,470	12,732	2,103,659
11,084	6,810	310	-	257	5,090	40,629	-	22,047	6,315	458,840	4,720	1,475,443
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	36	-	2,608
-	-	-	-	-	-	-	-	-	-	269	-	3,763
-	-	-	-	-	-	-	-	-	-	-	-	3,551
-	-	-	-	-	-	-	-	-	-	-	-	292
-	-	-	-	-	-	-	-	-	-	-	-	814
-	-	-	-	-	-	-	-	-	-	-	-	-
415	311	-	62	83	337	-	38	57	34	14,031	259	24,526
125	8,442	-	63	362	1,150	1,579	1,956	1,912	224	3,533	373	34,310
14,559	22,491	1,710	-	2,969	2,859	139,983	6,573	10,361	22,510	171,238	7,378	515,303
-	-	37	-	32	16	-	86	-	-	19,525	2	43,048
1,084	5,403	345	580	547	-	118,067	-	9,494	4,660	25,424	912	364,257
-	-	8	-	-	-	16,269	-	6,011	505	3,638	117	158,121
-	-	-	-	-	-	6	-	-	-	-	-	6
-	18	47	-	-	-	1,672	-	171	-	103	-	8,882
-	114	134	-	-	-	3,529	-	407	-	651	-	20,743
-	-	-	-	-	-	787	-	-	-	-	-	820
-	-	-	-	-	-	33	-	-	-	-	-	137
-	-	-	-	5	-	889	-	18	-	-	-	4,504
-	-	-	-	-	-	-	-	-	-	-	-	3,253
201	133	-	210	94	-	2,029	-	-	-	381	-	4,789
-	265	-	252	89	-	5,793	-	544	5	62	529	13,032
883	2,819	36	118	160	-	82,602	-	111	2,473	13,849	253	117,106
-	2,054	121	-	200	-	4,459	-	2,232	1,678	6,739	13	32,866

Fuel Consumption Table for Power Generation in 2009 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
19,780	36,616	2,155	94	2,616	8,690	183,736	7,854	31,611	27,156	619,715	10,071	1,969,850
7,698	6,341	623	-	258	4,442	51,348	-	22,158	6,687	436,870	3,560	1,438,427
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1,523
-	-	-	-	-	-	-	-	-	-	304	-	2,695
-	-	-	-	-	-	-	-	-	-	-	-	3,322
-	-	-	-	-	-	-	-	-	-	-	-	529
-	-	-	-	-	-	-	-	-	-	-	-	-
384	390	2	46	76	261	-	53	57	21	1,642	22	10,639
205	8,993	-	47	268	917	3,549	1,446	1,411	142	4,151	243	37,183
11,467	20,891	1,495	-	2,014	3,064	128,839	6,233	7,985	20,307	159,754	6,243	455,381
26	-	34	-	-	6	-	121	-	-	16,994	2	20,150
1,475	5,302	319	597	411	-	108,929	-	9,604	5,123	22,148	735	303,398
-	-	8	-	-	-	15,582	-	6,278	562	2,503	119	104,915
-	-	-	-	-	-	5	-	-	-	-	-	5
-	18	41	-	-	-	1,437	-	92	-	80	-	6,156
-	86	116	-	-	-	3,345	-	235	-	486	-	8,138
-	-	-	-	-	-	752	-	-	-	-	-	816
-	-	-	-	-	-	26	-	-	-	-	-	136
-	-	-	-	5	-	883	-	22	-	-	-	5,073
-	-	-	-	-	-	-	-	-	-	-	-	2,751
92	181	-	206	104	-	1,932	-	-	138	111	-	6,659
-	298	-	274	60	-	5,642	-	531	9	116	380	14,424
1,186	2,842	36	118	85	-	75,391	-	115	2,444	12,931	219	124,348
197	1,877	117	-	158	-	3,933	-	2,331	1,971	5,920	16	29,977



## 3.22.6 Stock Table by Energy Resources

## Stock Table by Energy Resource in 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Opening Stocks</b>									
Hard Coal	-	-	-	-	-	-	0	584	-
Coking Coal	-	-	-	-	-	-	-	-	-
Other bituminous coal	-	-	-	-	-	-	-	584	-
Subbituminous Coal	-	-	-	-	-	-	0	-	-
Anthracite	-	-	-	-	-	-	-	-	-
Lignite	-	-	-	-	-	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-	-	-	-	-	-	-	-	-
BKB/PB	-	-	-	-	-	-	-	-	-
Crude Oil & NGL	2,032	2,742	7,309	540	-	-	-	12,795	14,477
Gasoline	806	11	1,939	218	711	-	-	1,510	545
Naphtha	269	7	423	59	18	-	-	675	267
Jet Fuel	-	-	4	-	18	-	-	-	-
Kerosene	796	17	2,204	238	791	-	-	2,432	1,776
Gas/Diesel Oil	162	-	382	85	30	-	-	1,552	1,418
Fuel Oil	202	0	107	69	-	-	-	2,377	852
LPG	-	-	-	-	-	-	-	-	-
Other Petroleum Products	750	3	1,683	264	-	-	-	344	381
Natural Gas	-	-	6,692	-86	-	-	-	-15	-1,090
Others	-	-	-	-	-	-	-	-	-
<b>Total Opening Stocks</b>	<b>5,017</b>	<b>2,781</b>	<b>20,744</b>	<b>1,387</b>	<b>1,568</b>	<b>-</b>	<b>0</b>	<b>22,255</b>	<b>18,626</b>
<b>Closing Stocks</b>									
Hard Coal	-	-	-	-	89,100	-	-	-	-
Coking Coal	-	-	-	-	10,666	-	-	-	-
Other bituminous coal	-	-	-	-	78,435	-	-	-	-
Subbituminous Coal	-	-	-	-	-	-	-	-	-
Anthracite	-	-	-	-	2,189	-	-	-	-
Lignite	-	-	-	-	1,618	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-	-	-	-	11,061	-	-	-	-
BKB/PB	-	-	-	-	19	-	-	-	-
Crude Oil & NGL	2,279	2,555	8,483	539	8,900	-	-	13,985	15,050
Gasoline	756	12	2,398	161	-	-	794	1,558	590
Naphtha	233	8	281	67	109	-	-243	694	302
Jet Fuel	-	-	3	-	-	-	-	-	-
Kerosene	680	14	2,327	286	-	-	-1,781	2,323	1,821
Gas/Diesel Oil	94	-	481	94	-	-	-1,020	1,533	1,498
Fuel Oil	222	0	134	97	29	-	396	2,377	1,110
LPG	-	-	-	-	-	-	-	-	-
Other Petroleum Products	869	1	1,430	302	4,706	-	-	316	339
Natural Gas	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-
<b>Total Closing Stocks</b>	<b>5,133</b>	<b>2,591</b>	<b>15,537</b>	<b>1,546</b>	<b>117,731</b>	<b>-</b>	<b>-1,854</b>	<b>22,785</b>	<b>20,710</b>
<b>Stock Change</b>									
Hard Coal	-	-	-	-	-	-	-	-	-
Coking Coal	-	-	-	-	-	-	-	-	-
Other bituminous coal	-	-	-	-	-	-	-	-	-
Subbituminous Coal	-	-	-	-	-	-	-	-	-
Anthracite	-	-	-	-	-	-	-	-	-
Lignite	-	-	-	-	-	-	-	-	-
Peat	-	-	-	-	-	-	-	-	-
Coke	-	-	-	-	-	-	-	-	-
BKB/PB	-	-	-	-	-	-	-	-	-
Crude Oil & NGL	-	-	-	-	-	-	-	-	-
Gasoline	-	-	-	-	-	-	-	-	-
Naphtha	-3,406	-111	-1,070	-513	-2,462	-5,271	-	-5,389	-4,012
Jet Fuel	-	-	-	-	-	-	-	-	-
Kerosene	-	-	-	-	-	-	-	-	-
Gas/Diesel Oil	-	-	-	-	-	-	-	-	-
Fuel Oil	-	-	-	-	-	-	-	-	-
LPG	-	-	-	-	-	-	-	-	-
Other Petroleum Products	-	-	-	-	-	-	-	-	-
Natural Gas	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-
<b>Total Stock Change</b>	<b>-3,406</b>	<b>-111</b>	<b>-1,070</b>	<b>-513</b>	<b>-2,462</b>	<b>-5,271</b>	<b>-</b>	<b>-5,389</b>	<b>-4,012</b>

Stock Table by Energy Resource in 2010 (Continued)

												ktoe
Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam	Total
68	-	-	-	70	-	-	-	3,696	-	-	-	4,418
-	-	-	-	-	-	-	-	318	-	-	-	318
-	-	-	-	70	-	-	-	2,920	-	-	-	3,574
68	-	-	-	-	-	-	-	458	-	-	-	526
-	-	-	-	38	-	-	-	-	-	-	532	570
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	4	-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	3,185	469	-	86	-	40,439	-	4,318	-	133,219	-	221,612
1,109	1,114	231	-	-	-	2,365	-	1,020	-	20,601	473	32,654
-	116	66	-	469	-	-	-	-	-	4,656	-	7,025
-	-	-	-	-	-	-	-	-	-	-	-	23
-	746	195	-	270	-	3,707	-	1,135	-	21,579	694	36,579
-	580	34	-	-	-	5,259	-	362	-	8,791	347	19,002
-	95	7	-	57	-	288	-	326	-	6,590	-	10,969
-	-	-	-	-	-	-	-	-	-	-	-	-
-	277	51	-	2,850	2	-	-	-	-	6,362	-	12,967
-	-329	-127	-	-	-	-6,708	-	-	-	548	-	-1,114
-	-	-	-	-	-	-	-	-	-	-	-	-
1,176	5,784	926	-	3,843	2	45,350	-	10,858	-	202,346	2,045	344,708
-	-	-	-	-	104	-	-	3,529	-	-	-	92,734
-	-	-	-	-	-	-	-	221	-	-	-	10,886
-	-	-	-	-	-	-	-	3,007	-	-	-	81,442
-	-	-	-	-	104	-	-	302	-	-	-	406
-	-	-	-	-	-	-	-	9	-	-	-	2,198
-	-	-	-	-	-	-	-	-	-	-	-	1,618
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	11,061
-	-	-	-	-	-	-	-	-	-	-	-	19
336	3,316	509	25	-	122	42,894	-	4,475	-	133,738	499	237,704
-	1,007	290	-2	600	10	2,498	-	1,089	-	17,828	-	29,588
216	129	56	-3	-	-	-	-	-	-	4,820	-	6,669
-	-	-	-	-	-	-	-	-	-	-	-	3
89	937	132	-13	-	48	4,099	-	1,021	-	21,408	-	33,392
33	616	26	-9	350	15	5,547	-	374	-	9,541	-	19,172
289	46	10	0	-	17	345	-	305	-541	6,514	-	11,352
-	-	-	-	-	-	-	-	-	-	-	-	-
40	295	49	-	-	-	-	-	-	-	6,589	-	14,936
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
1,003	6,347	1,073	-2	950	316	55,383	-	10,802	-541	200,439	499	460,447
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-2,703	-778	-	-	-989	-6,238	-	-1,979	-3,628	-21,565	-	-60,114
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-2,703	-778	-	-	-989	-6,238	-	-1,979	-3,628	-21,565	-	-60,114

## 3.22.7 Power Generation Capacity Table

**Power Generation Capacity - Total**

MW

	1990	2000	2005	2006	2007	2008	2009	2010
Australia	38,451	46,204	50,537	51,207	53,178	54,604	55,985	58,820
Brunei Darussalam	334	763	759	759	759	814	814	888
Canada	104,141	111,324	122,838	123,947	126,376	127,610	135,397	136,947
Chile	5,099	9,894	12,586	12,865	13,180	14,019	15,731	16,231
China	137,891	319,321	509,410	622,000	713,290	792,530	873,970	962,180
Hong Kong, China	8,342	11,568	11,804	12,320	12,644	12,624	12,644	12,624
Indonesia	9,275	20,762	27,664	30,958	31,416	30,298	30,298	32,872
Japan	194,730	258,838	274,558	274,467	275,529	275,588	277,511	281,082
Republic of Korea	21,021	53,693	66,537	70,081	73,373	79,859	80,610	84,700
Malaysia	5,582	13,762	23,626	21,088	22,973	23,029	26,637	24,817
Mexico	27,371	40,345	52,497	55,352	57,839	58,304	59,693	62,002
New Zealand	7,176	8,456	8,920	8,931	9,481	9,436	9,436	9,698
Papua New Guinea	490	543	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	4,143	6,070	6,201	6,658	6,658	7,158	7,987	8,000
Philippines	6,869	13,185	15,619	15,803	15,803	13,048	13,319	13,319
Russia	213,400	212,771	219,043	221,414	223,981	225,238	225,499	222,935
Singapore	3,667	6,610	10,106	10,106	10,606	10,606	10,606	10,606
Chinese Taipei	16,883	27,385	43,146	45,009	45,881	46,382	47,976	48,882
Thailand	8,725	20,802	26,269	26,815	28,285	30,508	30,508	31,486
United States of America	733,589	812,630	978,539	986,954	995,879	1,011,255	1,026,871	1,041,000
Viet Nam	2,537	6,192	11,340	11,823	N.A.	N.A.	N.A.	17,521

**Power Generation Capacity - Thermal Power**

MW

	1990	2000	2005	2006	2007	2008	2009	2010
Australia	30,130	36,945	40,460	41,042	42,539	43,774	44,876	47,231
Brunei Darussalam	334	763	759	759	759	814	814	888
Canada	31,201	33,183	36,794	36,264	37,757	37,436	44,611	45,103
Chile	2,421	5,464	7,360	7,633	7,804	8,566	10,091	10,576
China	101,845	237,540	384,130	484,050	554,420	601,320	652,050	706,630
Hong Kong, China	8,342	11,568	11,804	12,320	12,644	12,624	12,644	12,624
Indonesia	7,040	17,386	23,643	26,626	26,844	25,845	25,845	27,973
Japan	124,984	166,648	177,223	175,767	176,339	176,412	179,324	181,736
Republic of Korea	11,065	36,817	45,365	46,666	49,888	55,977	56,482	60,389
Malaysia	4,185	11,708	21,242	18,758	20,611	20,745	23,134	22,488
Mexico	18,155	28,441	39,540	42,110	43,817	44,383	45,320	47,736
New Zealand	2,296	2,809	2,952	2,963	3,342	3,130	2,962	3,186
Papua New Guinea	335	319	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	1,744	3,210	2,938	3,395	3,395	2,244	2,641	4,682
Philippines	3,661	8,953	10,393	10,542	10,542	8,676	9,041	9,041
Russia	149,700	146,670	149,915	151,513	153,335	154,778	153,800	151,114
Singapore	3,667	6,610	10,106	10,106	10,606	10,606	10,606	10,606
Chinese Taipei	9,177	17,819	32,756	34,564	35,277	35,650	37,177	37,924
Thailand	6,451	17,865	20,575	21,023	22,412	24,547	24,547	25,109
United States of America	536,667	610,124	767,316	772,160	775,198	781,792	786,052	793,551
Viet Nam	1,362	2,900	4,382	7,137	N.A.	N.A.	N.A.	10,187

## Power Generation Capacity - Hydro Power

MW

	1990	2000	2005	2006	2007	2008	2009	2010
Australia	8,321	9,201	9,285	9,285	9,317	9,304	9,298	9,538
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	59,381	67,407	71,978	72,838	73,458	74,407	74,687	75,078
Chile	2,678	4,430	5,224	5,230	5,356	5,433	5,452	5,467
China	36,046	79,352	116,520	128,570	145,260	171,520	196,790	213,400
Hong Kong, China	-	-	-	-	-	-	-	-
Indonesia	2,095	3,015	3,221	3,532	3,529	3,510	3,510	3,710
Japan	37,831	46,325	47,348	47,357	47,374	47,637	47,949	47,966
Republic of Korea	2,340	3,149	3,883	5,485	5,492	5,505	5,515	5,525
Malaysia	1,397	2,054	2,091	2,120	2,120	2,120	2,107	2,107
Mexico	7,838	9,653	10,598	10,800	11,577	11,471	11,543	11,338
New Zealand	4,619	5,193	5,346	5,345	5,347	5,371	5,326	5,250
Papua New Guinea	155	224	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	2,400	2,860	3,207	3,216	3,216	3,242	3,277	3,318
Philippines	2,153	2,301	3,222	3,257	3,257	2,950	2,914	2,914
Russia	43,400	44,345	45,797	46,062	46,804	47,066	47,308	47,430
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	1,562	4,422	4,512	4,512	4,523	4,540	4,539	4,579
Thailand	2,274	2,936	3,476	3,476	3,475	3,481	3,481	3,488
United States of America	92,360	98,881	98,887	99,282	99,771	99,788	100,678	101,023
Viet Nam	1,176	3,292	4,155	4,401	N.A.	N.A.	N.A.	7,334

## Power Generation Capacity - Nuclear Power

MW

	1990	2000	2005	2006	2007	2008	2009	2010
Australia	-	-	-	-	-	-	-	-
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	13,538	10,615	13,345	13,345	13,345	13,345	12,665	12,665
Chile	-	-	-	-	-	-	-	-
China	-	2,100	6,840	6,850	8,850	8,850	9,000	10,820
Hong Kong, China	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-
Japan	31,645	45,248	48,222	49,580	49,467	49,467	47,935	48,847
Republic of Korea	7,616	13,716	17,176	17,716	17,716	17,716	17,716	17,716
Malaysia	-	-	-	-	-	-	-	-
Mexico	675	1,365	1,365	1,365	1,365	1,365	1,365	1,365
New Zealand	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-
Russia	20,300	21,730	23,242	23,742	23,742	23,304	24,300	24,300
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	5,144	5,144	5,144	5,144	5,144	5,144	5,144	5,144
Thailand	-	-	-	-	-	-	-	-
United States of America	99,643	97,860	99,988	100,334	100,266	100,755	101,004	101,167
Viet Nam	-	-	-	-	N.A.	N.A.	N.A.	-

## Power Generation Capacity - Others

MW

	1990	2000	2005	2006	2007	2008	2009	2010
Australia	-	58	792	880	1,322	1,526	1,811	2,051
Brunei Darussalam	-	-	-	-	-	-	-	-
Canada	21	119	721	1,500	1,816	2,422	3,434	4,101
Chile	-	-	2	2	20	20	188	188
People's Republic of China	-	329	1,920	2,530	4,760	10,840	16,130	31,330
Hong Kong, China	-	-	-	-	-	-	-	-
Indonesia	140	360	800	800	1,043	942	942	1,190
Japan	270	617	1,765	1,763	2,349	2,072	2,303	2,533
Republic of Korea	-	11	113	214	277	661	897	1,070
Malaysia	-	-	293	210	242	164	1,396	221
Mexico	703	886	994	1,077	1,080	1,085	1,465	1,563
New Zealand	261	454	622	623	792	935	1,148	1,262
Papua New Guinea	-	-	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	-	1	55	47	47	1,672	2,069	-
Philippines	1,055	1,931	2,004	2,004	2,004	1,422	1,364	1,364
Russia	-	26	89	97	100	90	91	91
Singapore	-	-	-	-	-	-	-	-
Chinese Taipei	1,000	-	735	789	936	1,048	1,116	1,234
Thailand	-	1	2,218	2,316	2,398	2,480	2,480	2,889
United States of America	4,919	5,765	12,348	15,178	20,644	28,920	39,137	45,259
Viet Nam	-	-	2,803	285	N.A.	N.A.	N.A.	-

## Appendices



## 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 economy of ultimate origin; refinery feedstocks and finished products should be reported as coming from the economy 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 economy to the final destination.

### 3. International Marine Bunkers

International Marine 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. International Aviation Bunkers

International aviation bunkers includes deliveries of aviation fuels to aircraft for international aviation. Fuels used by airlines for their road vehicles are excluded. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline.

### 5. 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.

### 6. 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.

### 7. 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 economy'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 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.

## 2.2 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.

## 2.3 Rail

Refers to rail traffic, including industrial railways.

## 2.4 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.

## 2.5 Pipeline Transport

Refers to transport of goods through pipelines.

## 2.6 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 7:** Nuclear shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33 percent.

**Column 8:** 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 9:** 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 10:** 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 11:** 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 12:** TOTAL = the total of columns (1) to (11).

## 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 4/5:** International marine and Aviation bunkers cover those quantities delivered to sea-going ships and International flights of all flags. Consumption by ships and planes engaged in transport in inland and coastal waters is not included.

**Row 6:** 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 7:** 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 8:** Transfers refer to Interproduct Transfers, Product Transferred, liquid products from Gas Separation and Recycled Products as defined in Appendix B.

**Row 9:** Total Transformation Sector is made up of Main Activity Producer (Row10) + Autoproducers (Row11) + Gas Processing (Row12) + Petroleum Refineries (Row13) + Coal Transformation (Row14) + Other Transformation (Row15).

**Row 10:** Main Activity Producer, column 1 to 9 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 12, as a negative number.

**Row 11:** Autoproducers, columns 1 to 9 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 10, "Electricity". Transformation losses appear in the "Total", column 12 as a negative number.

**Row 12:** 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 "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 13:** The row Petroleum refineries shows the transformation of crude oil, NGL and condensate to petroleum products.

**Row 14:** 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 15:** 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 16:** loss & Own use: 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 17:** Discrepancy is a category which includes the sum of the unexplained statistical differences for individual fuels.

**Row 18:** 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 19:** Consumption of the Industry sector (energy used for transport by industry is not included here but reported under transport).

**Row 20:** 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).

**Row 21:** Chemical & 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)

**Row 22:** Non-metallic Minerals 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

**Row 23:** Other Industries cover consumption of all other manufacturing industries, mining, quarrying and constructions.

**Row 24:** The Transport sector includes all fuels for transport, except international marine bunkers. It includes transport in the industry sector and covers road, railway, domestic air transport, inland waterways (including small craft, fishing vessels and coastal shipping not included under marine bunkers) and non-specified transport.

**Row 25:** 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.

**Row 26:** Road covers 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.

**Row 27:** Rail refers to rail traffic, including industrial railways.

**Row 28:** 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.

**Row 29:** Pipeline Transport refers to transport of goods through pipelines.

**Row 30:** Non-Specified Industry covers transport activities not included elsewhere.

**Row 31:** Other sectors cover agriculture, residential, commercial and public services and non-specified consumption.

**Row 32:** Refers to all households including "households with employed persons." ISIC Division 95 (NACE Division 95).

**Row 33:** These refer to business and offices in the public and private sectors.

**Row 34:** Consumption of the Agriculture sector.

**Row 35:** Other shows non-specified use which may include military use.

**Row 36:** 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 21). 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 2010

	Australia	Brunei	Canada	Chile	China	Hong Kong	Indonesia	Japan	Korea
<b>Coal</b>									
Coking Coal	6,807		6,004	6,840	5,775			6,581	6,750
Anthracite			6,301		6,565	6,998		6,105	5,780
Other Bituminous Coal	6,138		5,785	6,604	5,073	6,298		5,832	5,950
Sub-bituminous Coal	4,413		4,356				5,880	5,103	5,000
Lignite	2,341		3,412		3,363				
Peat									
<b>Coal Products</b>									
Patent Fuels								5,146	4,600
Coke Oven Coke	6,126		6,558	6,766	6,800			6,674	7,000
Coal Tar				9,873	8,000				
Coal Briquettes	5,015				4,170		4,740		
<b>Crude Oil and NGL</b>									
Crude Oil	10,343	11,312	10,220	10,313	10,000			10,140	10,199
Natural Gas Liquids	10,846	11,312	10,801	11,487				11,204	
Refinery Feedstocks	10,338		10,151					10,346	10,700
Additives/Oxygenates	6,766	9,597	6,887	5,410					2,146
Other Hydrocarbons		11,021	10,000						
<b>Petroleum Products</b>									
Refinery Gas	11,488	11,367	11,488	11,488	11,000			10,515	11,488
Ethane	11,799		11,799						
LPG	11,393	11,021	11,297	11,297	12,000	10,878	11,934	11,530	11,393
Naptha	10,318		10,748	10,748	9,176	10,540	11,064	10,347	10,318
Motor Gasoline	10,653	10,686	10,700	10,700	10,300	10,217	11,064	10,654	10,653
Bio-ethanol	6,401		6,401				3,702		
Aviation Gasoline	10,653		10,700	10,700			9,801		10,653
Gasoline Type Jet Fuel			10,700		10,300				10,653
Kerosene Type Jet Fuel	10,629	10,646	10,653	10,653	10,300	10,262	10,398	10,632	10,629
Other Kerosene	10,247	10,646	10,461	10,461	10,300	10,522	10,212	10,231	10,247
Gas/Diesel Oil	10,175	10,359	10,175	10,342	10,200	10,148	9,166	10,337	10,175
Bio-diesel	8,790		10,350			9,028	3,702		9,126
Fuel Oil	10,175	9,714	9,602	9,602	10,000	9,912	10,319	10,566	10,175
White Spirit SBP	10,270		10,270	9,602	9,176				10,270
Lubricants	10,247	9,982	10,032	9,602	9,176		9,996	10,240	10,247
Bitumen	9,267	9,552	9,554	9,602	9,176				9,267
Paraffin Wax	9,554		9,554	9,602	9,176		9,996		9,554
Petroleum Coke	8,073		7,643	7,643	7,350			6,784	8,073
Other Products	9,554		9,554	9,554	9,310		9,996	9,285	9,554
<b>Natural Gas</b>									
Natural Gas	8,661	9,290	8,280	8,407	9,310	8,938	8,885	8,416	8,960
<b>New and Renewables</b>									
Fuel wood and Wood waste	3,701		3,701	3,701				3,702	3,701
Bagasse	1,958		1,958	1,958					1,958
Charcoal	6,897		6,897	6,897		6,998		6,898	6,897
Other Biomass	3,701		3,701	3,701			3,702		3,701
Biogas									
Industrial Waste	3,343		3,343	3,343	7,000			3,344	3,343
Municipal Solid Waste	3,343		3,343	3,343				3,344	3,343
Liquid Biofuels	6,386		6,386	6,386		9,028			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 2010 (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	7,081				6,807		7,011		6,721	5,600
				6,500		6,927		6,745	7,500	6,879	5,600
	5,609	6,636		6,500		5,734		6,128	6,300	6,409	5,600
5,985	4,635	4,927			5,278			5,605		4,541	
	3,368	3,471				3,563		3,957	2,500	3,318	
						2,380					5,600
								3,610			
	6,334			6,735		6,930		6,650	6,600	6,889	5,600
						4,200			6,300		
10,310	11,172	10,331	10,120	10,271	9,905	10,050	10,709	10,442	10,089	10,315	10,180
10,581	10,189	10,938	10,120	9,884	7,694	10,010			9,173	10,984	
10,349		10,526								10,480	
	5,518	7,471								6,000	
10,150		10,000								12,182	
10,149	11,488	11,488	10,515	14,992		11,820	11,500	14,996		11,488	
	11,799	11,300				11,820				11,799	
10,877	11,297	11,393	11,393	11,080	10,760	10,990	11,923	11,893	11,778	11,297	10,900
	10,748	10,750	10,500		11,031	10,510	11,923	10,924		10,748	10,300
10,500	10,700	10,653	10,654	10,402	10,570	10,510	11,174	10,494	10,319	10,700	10,500
		6,400		6,344	7,083	6,400			10,319	6,388	
	10,700	10,653			10,894	10,510		10,669		10,700	
		10,653				10,270		10,485			
10,316	10,653	10,629	10,632	10,231	9,957	10,270	12,425	10,038	11,675	10,653	10,300
10,150	10,461	10,247	10,233	10,231	9,855	10,270	11,140	10,600	10,442	10,461	10,300
10,150	10,175	10,175	10,284	9,847	10,049	10,170	10,957	10,066	10,112	10,175	10,200
		10,350		12,171	9,416	8,790			10,112	9,777	
9,912	9,602	10,175	10,520	10,381	9,819	9,550	9,839	10,027	10,105	9,602	9,900
	10,270	10,270				10,410		11,538		10,270	
	10,032	10,247	10,240			10,030		9,600		10,032	10,300
	9,554	9,267			9,248	9,310		10,000		9,554	10,300
	9,554	9,600				9,550		10,664		9,554	
	7,643	8,073	8,078			7,640		8,200		7,643	10,300
10,150	9,554	9,554	9,602	10,242	9,864	9,550	10,320	12,496		9,554	10,300
8,385	8,327	7,978	8,113	9,657	8,282	8,218	8,385	9,000	8,617	8,195	9,000
4,456	3,701	3,701		3,598	3,455	3,701		3,039	3,820	3,701	238,800
	1,958	1,958		1,499	2,166	1,958			1,800	1,958	
	6,897	6,897		6,558	6,313	6,897			6,900	6,897	
4,456	3,701	3,701		3,596	3,163	3,701			3,030	3,701	
								3,690	5,000		
	3,343	3,343				3,343				3,343	
4,456	3,343	3,343			3,344	3,343	3,344	2,092	1,160	3,343	
6,400	6,386	6,386		12,163	8,618	6,386			10,194	6,386	