Ministry of Energy and Mineral Resources
Republic of Indonesia

2015

HANDBOOK OF ENERGY & ECONOMIC STATISTICS OF INDONESIA

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Preface

The updating of the Handbook of Indonesia's Energy Economy Statistics, is a part of the Center for Data and Information Energy Mineral Resources (CDI-EMR) effort to provide accurate and reliable energy economic data and information consolidated in book. Data and information related to energy economy are dispersed in various sources and locations, and are generally in different formats unready for energy analysis. In addition, they are generally not provided with sufficient explanation or clarification. The standardization of energy economic data is still quite a critical problem. Currently, some researchers in various institutions, do not have common terminology on energy economy, in some cases may have a number of meanings. His subsequently leads to inaccurate energy analysis.

Currently, the problem related to energy data in Indonesia is the unavailability of demand-side data. To date, energy data are actually derived from supply-side data. In other word, consumption data are assumed to be identical with the sales data. Such assumption maybe quite accurate provided there is no disparity between domestic energy price and its international price. Disparity in energy price would promote misuse of energy. Thus, sales data on an energy commodity cannot be regarded as the same as that of its consumption. For that reason, in this statistics handbook, energy consumption data concept is presented after a computation based on a number energy parameters.

We hope the process to standardize Energy and Economy data and information in the future will be continued as part of the updating of the Handbook, (CDI-EMR) will continued to coordinate with all related parties within the Ministry of Energy and Mineral Resources (MEMR) as well as with statistics units outside MEMR.

We would like to appreciate all parties, for their diligence and patience in preparing this book. May God Almighty always guides us in utilizing our energy resources wisely for the maximum benefit of all the people of Indonesia.

Jakarta, November 2015
Head of Center for Data and Information
Technology on Energy and Mineral Resources

Introduction

This Handbook of Indonesia's Energy Economy Statistics, 13th edition, contains data on Indonesia's energy and economy from 2000 through 2014. This edition is an update version of the 11th edition, covering estimated energy demand for every sector. The structure of the table is arranged as follows:

A. Tables

Show in 6 Main Categories, as follows:
- Table 1 General Information and Energy Economic Indicators
- Table 2 Indonesia's Energy Balanced Table
- Table 3 Situation of Energy Supply and Demand
- Table 4 Energy Price
- Table 5 Situation of Energy Demand by Sectors
- Table 6 Situation of Energy Supply by Energy Sources

B. Annexes

Annex 1. Methodology and Clarification of Tables which explains the methodology applied to prepare the data for the tables.

Annex 2. Glossary, contains important terms which are used in the tables and their respective units.

Annex 3. Conversion Factors, presenting list of multiplication factors used to convert various original units of energy into BOE (Barrel Oil Equivalent).

List of Contents

Concise Energy Profile Indonesia 2014

A. SOCIO ECONOMY

Teritorial Area *) :	7,788,810.32	km^2
Land Area *) :	1,910,931.32	km^2
Population :	252,164.79	Thousand People
Household :	64,766.99	Thousand Household

GDP Regional

Total Value :	8,971.09	Trillion Rupiah
Per Capita :	35,576.30	Thousand Rupiah per Year

B. ENERGY PRODUCTION

Primary Energy Production

Crude Oil :	287,902.15	Thousand Barel
Natural Gas :	2,687.91	BSCF
Coal :	458,096.71	Thousand Tonnes
Hydro Power :	52,031,668.97	Million Kcal
Geothermal :	73,598.03	Thousand Tonnes Geothermal Steam

C.	**FINAL ENERGY CONSUMPTION**	**1,195.95**	**Million BOE**
	Energy Consumption by Type (excluded non energy use)		
	Coal :	220.64	Million BOE
	Fuel :	396.21	Million BOE
	Gas :	95.32	Million BOE
	Electricity :	121.74	Million BOE
	Briquette :	0.06	Million BOE
	LPG :	51.94	Million BOE
	Biomass :	310.04	Million BOE
	Energy Consumption by Sector	**1,195.95**	
	Industry :	433.58	Million BOE
	Household :	369.89	Million BOE
	Commercial :	38.11	Million BOE
	Transportation :	334.20	Million BOE
	Other Sector :	20.16	Million BOE
	Non Energy :	96.84	Million BOE
D.	**RATIO ELECTRIFICATION**	**84.35**	**%**

Note : *) Temporary Data

1

ENERGY ECONOMIC INDICATORS

1.1. GDP and Energy Indicator

	Unit	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP at Constant Price 2000	Trillion Rupiahs	1,390	1,443	1,506	1,577	1,657	1,751	1,847	1,964	2,082	2,179	2,314	2,465	2,618	2,770	2,909
GDP Nominal	Trillion Rupiahs	1,390	1,684	1,863	2,014	2,296	2,774	3,339	3,951	4,951	6,209	6,447	7,423	8,242	8,078	8,971
GDP Nominal per Capita*)	Thousand Rupiahs	6,752	8,072	8,789	9,354	10,538	12,676	15,030	17,510	21,667	26,485	27,128	33,461	33,582	32,464	35,576
Population*)	Thousand	205,843	208,647	212,003	215,276	217,854	218,869	222,192	225,642	228,523	234,432	237,641	238,519	245,425	248,818	252,165
Number of Households	Thousand	52,005	54,314	55,041	56,623	58,253	55,119	55,942	56,411	57,131	58,422	61,165	62,080	63,097	63,938	64,767
Primary Energy Supply *)	Thousand BOE	726,687	772,282	799,806	859,053	872,677	896,445	899,168	955,703	984,022	1,015,318	1,145,068	1,235,550	1,278,788	1,306,130	1,457,149
Primary Energy Supply per Capita *)	BOE / capita	3.53	3.70	3.77	3.99	4.01	4.10	4.05	4.24	4.31	4.33	4.82	5.18	5.21	5.25	5.78
Final Energy Consumption*)	Thousand BOE	508,883	533,372	529,719	567,774	603,496	594,558	603,882	641,594	664,019	699,210	793,929	835,870	904,124	930,638	982,760
Final Energy Consumption per Capita*)	BOE / capita	2.47	2.56	2.50	2.64	2.77	2.72	2.72	2.84	2.91	2.98	3.34	3.50	3.68	3.74	3.90

	Growth (%)														
	Unit	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
GDP at Constant Price 2000	Trillion Rupiahs	3.83	4.38	4.72	5.03	5.69	5.50	6.35	6.01	4.64	6.22	6.49	6.23	5.81	5.01
GDP Nominal	Trillion Rupiahs	21.19	10.63	8.07	14.01	20.84	20.37	18.31	25.32	25.40	3.83	15.14	11.03	-1.99	11.06
GDP Nominal per Capita	Thousand Rupiahs	19.56	8.88	6.43	12.66	20.28	18.57	16.50	23.74	22.24	2.43	23.34	0.36	-3.33	9.59
Population	Thousand	1.36	1.61	1.54	1.20	0.47	1.52	1.55	1.28	2.59	1.37	0.37	1.42	1.38	1.35
Number of Households	Thousand	4.44	1.34	2.87	2.88	-5.38	1.49	0.84	1.28	2.26	4.69	1.50	1.37	1.33	1.30
Primary Energy Supply	Thousand BOE	6.27	3.56	7.41	1.59	2.72	0.30	6.29	2.96	3.18	12.77	7.91	3.50	2.14	11.56
Final Energy Consumption	BOE / capita	4.81	-0.68	7.18	6.29	-1.48	1.57	6.24	3.50	5.30	13.55	5.28	8.17	2.93	5.60
Final Energy Consumption per Capita	Thousand BOE	3.40	-2.26	5.55	5.03	-1.94	0.05	4.62	2.19	2.65	12.01	4.90	6.65	1.53	4.20

Sources : BPS, Statistics Indonesia; Bank Indonesia
Note : Primary Energy Supply and Final Energy Consumption which are Calculated is Commercial Energy (Excluded Biomass)
*) Revised Data for 2012 - 2013

2015 Handbook of Energy & Economic Statistics of Indonesia | 1

1.2. Macro Economic

Year	GDP Constant 2000 Prices				GDP Constant 2000 Prices			GDP Nominal (Current Prices)	Index GDP Deflator
	GDP	Private Consumption	Government Consumption	Fixed Capital Formation	Stock Change	Export of Goods and Services	Import of Goods and Services		
	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs	(2000=100)
2000	1,389,770.3	856,798.3	90,779.7	275,881.2	33,282.8	569,490.3	423,317.9	1,389,769.9	100.00
2001	1,442,984.6	886,736.0	97,646.0	293,792.7	41,846.8	573,163.4	441,012.0	1,684,280.5	116.72
2002	1,506,124.4	920,749.6	110,333.6	307,584.6	13,085.0	566,188.4	422,271.4	1,863,274.7	123.71
2003	1,577,171.3	956,593.4	121,404.1	309,431.1	45,996.7	599,516.4	428,874.6	2,013,674.6	127.68
2004	1,656,516.8	1,004,109.0	126,248.6	354,865.8	25,099.0	680,620.9	543,183.8	2,295,826.2	138.59
2005	1,750,815.2	1,043,805.1	134,625.6	393,500.5	33,508.3	793,612.9	639,701.9	2,774,281.1	158.46
2006	1,847,126.7	1,076,928.1	147,563.7	403,161.9	29,026.7	868,256.4	694,605.4	3,339,479.6	180.79
2007	1,964,327.3	1,130,847.1	153,309.6	441,361.5	-243.1	942,431.4	757,566.2	3,950,893.2	201.13
2008	2,082,315.9	1,191,190.8	169,297.2	493,716.5	2,170.4	1,032,277.8	833,342.2	4,951,356.7	237.78
2009	2,178,850.3	1,249,070.1	195,834.4	510,085.9	-2,065.2	932,248.6	708,528.8	5,606,203.4	257.30
2010	2,314,458.8	1,308,272.8	196,468.8	553,347.7	-604.4	1,074,568.7	831,418.3	6,446,851.9	278.55
2011	2,464,676.5	1,369,881.1	202,755.8	601,890.6	9,033.5	1,221,229.0	942,297.3	7,422,781.2	301.17
2012	2,618,139.2	1,442,193.2	205,289.7	660,942.3	53,228.4	1,245,781.0	1,004,957.5	8,241,864.3	314.80
2013	2,770,345.1	1,518,393.4	215,393.1	688,559.8	53,767.6	1,311,759.6	1,017,190.8	8,077,565.2	291.57
2014	2,909,181.5	1,601,234.6	219,876.4	719,046.9	63,354.1	1,295,554.1	986,938.0	8,971,090.8	308.37

Sources : BPS, Statistics Indonesia

1.3. Finance and Banking

Year	Money Supply (M1)		
	Currency Outside	Demand Deposits	Total
	Billion Rupiahs	Billion Rupiahs	Billion Rupiahs
2000	72,371	89,815	162,186
2001	76,342	101,389	177,731
2002	80,686	111,253	191,939
2003	94,542	129,257	223,799
2004	109,265	144,553	253,818
2005	124,316	157,589	281,905
2006	151,009	210,064	361,073
2007	183,419	277,423	460,842
2008	209,378	257,001	466,379
2009	226,006	289,818	515,824
2010	260,227	345,184	605,411
2011	307,760	415,231	722,991
2012	361,967	479,755	841,721
2013	399,589	487,475	887,064
2014	419,262	522,960	942,221

Source : Bank Indonesia

1.4. Price Index

Year	Wholesale Price Index *)			Consumer Price Index of 66 Cities *)	Coal Price Index **)	Electricity Price Index **)
	Export	Import	General			
	2000 = 100			2007=100		
2000	100.00	100.00	100.00	53.47	100.00	100.00
2001	113.02	112.66	114.16	59.62	129.79	122.34
2002	108.00	112.00	118.00	66.66	142.89	189.44
2003	109.00	114.00	122.00	71.17	150.09	251.99
2004	121.00	127.00	131.00	75.49	150.04	269.01
2005	145.00	149.00	151.00	83.38	163.57	271.56
2006	154.00	162.00	172.00	94.31	218.36	273.78
2007	167.00	186.00	195.00	100.00	220.27	275.76
2008	209.00	235.00	246.00	109.78	318.12	283.60
2009	134.10	156.61	162.71	115.06	476.18	284.23
2010	137.80	160.90	170.59	125.17	427.02	297.06
2011	154.11	177.37	183.31	129.91	454.27	298.04
2012	163.15	189.17	192.69	135.49	496.43	318.86
2013	145.16	134.43	128.76	146.84	530.25	325.93
2014	138.73	137.37	132.44	111.53	666.92	357.10

Note : *) 2009-2012 Based on 2005=100; Processed from BPS, Statistics Indonesia, Bank Indonesia
**) Revised Data for 2012 and 2013

1.5. Population and Employment

Year	Population *)	Labor Force	House-hold *)	Unem-ploy-ment	Unemploy-ment Percentage (toward labor force)	Average Wage		
						Industry	Hotel	Mining
	Thou-sand People	Thou-sand People	Thou-sand House-hold	Thou-sand People	(%)	Thousand Rupiahs Per Month		
2000	205,843	95,651	52,005	5,813	6.1	373	396	1,234
2001	208,647	98,812	54,314	8,005	8.1	541	575	1,227
2002	212,003	99,564	55,041	9,132	9.2	672	651	1,406
2003	215,276	100,316	56,623	9,531	9.5	713	581	2,117
2004	217,854	103,973	58,253	10,251	9.9	852	801	1,368
2005	218,869	105,802	55,119	10,854	10.3	870	788	2,114
2006	222,192	106,389	55,942	10,932	10.3	972	918	2,733
2007	225,642	109,941	56,411	10,011	9.1	1,050	1,042	3,890
2008	228,523	111,947	57,131	9,395	8.4	1,105	1,069	4,064
2009	234,757	113,833	60,249	8,963	7.9	1,173	1,110	3,322
2010	237,641	116,528	61,165	8,320	7.1	1,388	1,194	3,942
2011	238,519	117,370	62,630	7,700	6.6	1,346	1,256	3,881
2012	245,425	118,053	63,097	7,245	6.1	1,620	1,337	4,521
2013	248,818	118,193	63,938	7,389	6.3	1,816	1,500	4,740
2014	252,165	121,873	63,097	7,245	5.9	2,175	1,840	5,653

Sources : BPS, Statistics Indonesia
Note : *) Revised Data for 2012 and 2013

1.6. International Trade

Year	Based on Major Portion		Trade Index 2000=100		Balance Payment			Ex-change Rate Rupiah to US $	US $ Defla-tor*)
	Export	Import	Export	Import	Current Trans-action	Capital Trans-action	Total		
	Million US$				Million US$				
2000	62,124	33,515	100	100	7,992	-7,896	96	9,595	1.0000
2001	56,321	30,962	91	92	6,901	-7,617	-716	10,400	1.0240
2002	57,159	31,289	92	93	7,824	-1,103	6,720	8,940	1.0419
2003	61,058	32,551	98	97	10,882	-949	9,933	8,465	1.0640
2004	71,585	46,525	115	139	1,564	1,852	3,415	9,290	1.0946
2005	85,660	57,701	138	172	278	345	623	9,830	1.1303
2006	100,799	61,066	162	182	10,860	3,025	13,884	9,020	1.1668
2007	114,101	74,473	184	222	10,493	3,591	14,083	9,419	1.1982
2008	137,020	129,197	221	385	-637	-5,915	-6,552	10,950	1.2242
2009	119,646	88,714	193	265	10,628	4,852	15,481	9,400	1.0962
2010	158,074	127,447	254	380	5,144	26,620	31,765	8,991	1.1066
2011	200,788	190,948	323	570	1,685	13,656	15,321	9,068	1.0331
2012**)	207,073	207,621	333	619	-24,418	-24,368	491	9,670	1.0517
2013	197,060	200,548	317	598	-29,102	22,011	-7,091	12,189	1.0673
2014	191,438	192,403	308	574	-27,485	44,650	17,165	12,440	1.0869

Sources : BPS, Statistics Indonesia
Note : *) Derived from World Economic Outlook Database, April 2015, IMF
**) Revised Data for US$ Deflator

2015 Handbook of Energy & Economic Statistics of Indonesia | 1

1.7. Supply of Primary Energy

1.7.1 By Type

%

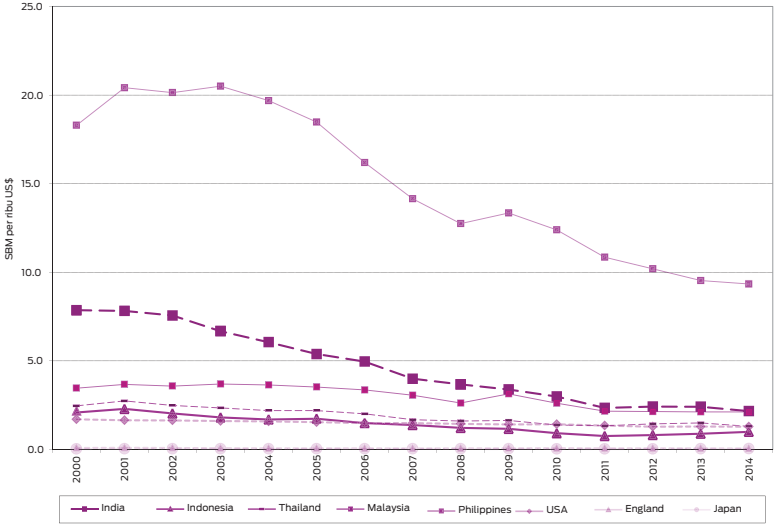
Type of Energy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*)	2013*)	2014
Oil	41.74	42.42	42.32	40.37	43.52	42.32	39.24	38.50	38.08	37.28	37.57	38.91	37.32	37.75	35.48
Coal	9.42	11.44	11.48	14.58	13.24	14.89	17.51	20.97	17.80	18.18	19.84	22.00	23.92	25.46	28.17
Gas	16.54	16.53	17.65	18.05	16.39	16.39	16.72	14.92	18.70	19.30	19.03	17.23	16.43	14.41	15.36
Hydropower	2.54	2.82	2.34	2.03	2.13	2.32	2.06	2.31	2.30	2.20	3.10	2.06	2.04	2.39	2.16
Geothermal	0.96	0.96	0.96	0.92	0.97	0.94	0.95	0.93	1.06	1.26	1.08	1.00	0.96	0.66	0.92
Biomass	28.80	25.83	25.25	24.05	23.75	23.15	23.51	22.37	22.03	21.71	19.29	18.64	19.04	18.99	17.55
Biofuel	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.06	0.10	0.15	0.29	0.33	0.38

1.7.2. By Type (Excluded Biomass)

Type of Energy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 *)	2013*)	2014
Oil	59.64	57.20	56.62	53.16	57.08	55.07	51.29	49.56	48.81	47.62	46.55	47.83	46.10	46.60	43.03
Coal	12.91	15.43	15.36	19.20	17.37	19.37	22.89	27.01	22.82	23.22	24.58	27.04	29.55	31.43	34.16
Gas	22.66	22.28	23.61	23.76	21.49	21.33	21.86	19.21	23.99	24.66	23.58	21.18	20.29	17.79	18.62
Hydropower	3.47	3.80	3.13	2.67	2.79	3.02	2.70	2.98	2.95	2.82	3.84	2.53	2.52	2.95	2.62
Geothermal	1.32	1.29	1.28	1.21	1.27	1.22	1.24	1.20	1.36	1.61	1.33	1.22	1.18	0.81	1.11
Biofuel	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.08	0.12	0.19	0.35	0.41	0.46

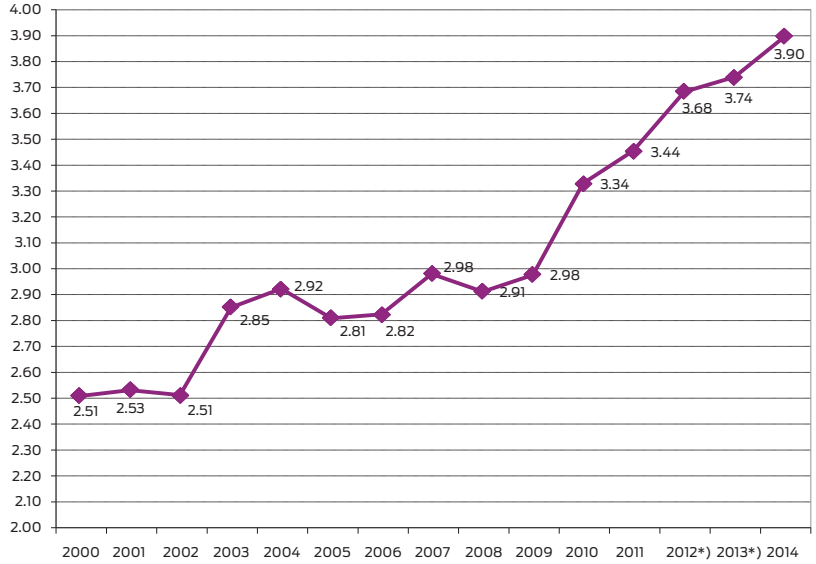
Note: Oil Including Crude Oil, Petroleum Product and LPG
Coal Including Coal and Briquette.
Gas Including Natural Gas and LNG
Biomass Including Firewood and Charcoal
Biofuel Shows Pure Bio Energy (not Blending Product)

1.8. Comparison of Primary Energy Intensity in Some Country



Sources : BP Statistical Review of World Energy 2015 and World Economic Outlook Database April 2015, IMF
Note : GDP Primary Energy Consumption Using US$ Fix Rate in Year 2000

1.9. Intensity of Final Energy Consumption per Capita



Note : *) Revised Data for 2012 - 2013

2

ENERGY BALANCED TABLE

2015 Handbook of Energy & Economic Statistics of Indonesia | 2

Indonesia Energy Balance Table 2014

(Thousand BOE)

		Hydro Power	Geother-mal	Biomass	Coal	Bri-que-tte	Natural Gas		Crude Oil	Fuel	Biofuel	LPG	Other Pe-troleum Product	Electricity	LNG	Total
1	**Primary Energy Supply**	**38,139**	**16,192**	**310,162**	**497,805**	**0**	**421,205**		**315,634**	**197,515**	**88,843**	**31,646**	**-22,245**	**6**	**-149,830**	**1,745,071**
	a. Production	38,139	16,192	310,162	1,924,006	0	482,749		287,902	0	88,843	0	0	0	0	3,147,993
	b. Import	0	0		10,662	0	0		121,993	195,181	0	30,723	7,009	6	0	365,573
	c. Export	0	0		-1,604,286	0	-61,543		-109,933	-4,101	0	0	-29,254	0	-149,830	-1,958,948
	d. Stock Change	0	0		167,423	0	0		15,672	6,435	0	923	0	0	0	191,391
2	**Energy Transformation**	**-38,139**	**-16,192**	**-126**	**-277,166**	**58**	**-275,878**		**-309,445**	**110,599**	**0**	**20,296**	**89,943**	**140,104**	**171,909**	**-384,037**
	a. Refinery	0	0	0	0	0	-3,771		-309,445	159,362	0	4,667	89,943	0	0	-59,245
	b. Gas Processing	0	0	0	0	0	-181,169		0	0	0	15,629	0	0	171,909	6,370
	c. Coal Processing Plant	0	0	0	-69	58	0		0	0	0	0	0	0	0	-10
	e. Power Plant	-38,139	-16,192	-126	-277,097	0	-90,939		0	-48,764	0	0	0	140,104	0	-331,152
	- State Own Utility (PLN)	-28,108	-6,450	0	-187,341	0	-80,854		0	-48,726	0	0	0	107,458	0	-244,022
	- Independent Power Producer (Non-PLN)	-10,031	-9,742	-126	-89,756	0	-10,084		0	-38	0	0	0	32,647	0	-87,130
3	**Own Use and Losses**	**0**	**0**	**0**	**0**	**0**	**-43,220**		**-6,189**	**-565**	**-177**	**0**	**0**	**-18,297**	**-22,079**	**-90,528**
	a. During Transformastion	0	0	0	0	0	-3,771		-6,189	0	0	0	0	-5,164	0	-15,124
	b. Energy Use/ Own Use	0	0	0	0	0	-39,450		0	0	0	0	0	0	0	-39,450
	c. Transmission & Distribution	0	0	0	0	0	0		0	-565	-177	0	0	-13,132	-22,079	-39,954
4	**Final Energy Supply**	**0**	**0**	**310,036**	**220,639**	**58**	**102,107**		**0**	**307,549**	**88,666**	**51,942**	**67,697**	**121,813**	**0**	**1,270,506**
5	**Statistic Discrepancy**	**0**	**0**	**0**	**0**	**0**	**-22,360**		**0**	**0**	**0**	**0**	**0**	**70**	**0**	**-22,290**
6	**Final Energy Consumption**	**0**	**0**	**310,036**	**220,639**	**58**	**124,467**		**0**	**307,549**	**88,666**	**51,942**	**67,697**	**121,743**	**0**	**1,292,796**
	a. Industry	0	0	45,188	220,639	58	93,551		0	32,994	0	753	0	40,402	0	433,585
	b. Transportation	0	0	0	0	0	207		0	245,235	88,666	0	0	95	0	334,203
	c. Household	0	0	263,495	0	0	114		0	4,929	0	49,810	0	51,545	0	369,893
	d. Commercial	0	0	1,353	0	0	1,447		0	4,232	0	1,379	0	29,701	0	38,113
	e. Other Sector	0	0	0	0	0	0		0	20,157	0	0	0	0	0	20,157
7	**Non Energy Use**	**0**	**0**	**0**	**0**	**0**	**29,148**		**0**	**0**	**0**	**0**	**67,697**	**0**	**0**	**96,845**

3

ENERGY SUPPLAY AND DEMAND

2015 Handbook of Energy & Economic Statistics of Indonesia | 3

3.1. Primary Energy Supply by Sources

(BOE)

Year	Coal BOE	Crude Oil & Product	Natural Gas & Product	Hydro Power		Geothermal	Biomass	Biofuel	Total
2000	93,831,548	433,360,999	164,649,922	25,248,631		9,596,400	269,054,110	0	995,741,609
2001	119,125,379	441,731,352	172,083,907	29,380,607		9,960,940	268,970,034	0	1,041,252,219
2002	122,879,411	452,817,870	188,822,314	25,038,179		10,248,040	270,230,078	0	1,070,035,892
2003	164,950,173	456,647,707	204,142,054	22,937,538		10,375,200	272,005,374	0	1,131,058,046
2004	151,543,284	498,117,696	187,553,776	24,385,647		11,077,000	271,806,233	0	1,144,483,636
2005	173,673,093	493,636,985	191,189,376	27,034,841		10,910,460	270,042,895	0	1,166,487,651
2006	205,779,290	459,929,016	196,599,386	24,256,796		11,182,742	276,335,944	1,420,404	1,175,503,577
2007	258,174,000	470,036,057	183,623,636	28,450,964		11,421,759	275,199,938	3,996,452	1,230,902,805
2008	224,587,657	474,496,098	236,049,566	29,060,413		13,423,610	277,981,421	6,404,542	1,262,003,306
2009	236,439,000	467,883,065	251,035,250	28,662,883		14,973,198	279,313,257	16,324,713	1,294,631,364
2010	281,400,000	518,405,561	269,942,185	43,952,237		15,266,074	273,670,429	28,560,422	1,431,196,907
2011	334,142,760	546,635,311	261,708,332	31,268,976		15,119,152	283,140,897	46,675,773	1,518,691,200
2012*)	377,892,961	533,830,676	259,456,414	32,226,297		15,129,340	300,838,657	60,252,319	1,579,626,663
2013**)	410,566,607	542.950.370	232,399,957	38,494,094		10,644,873	306,232,741	71,073,722	1,612,362,364
2014	497,804,744	544,795,076	271,375,371	30,139,213		16,191,566	310,162,037	88,842,904	1,767,310,910

*Note : *) Revised Data for Geothermal and Biomass
**) Revised Data for Crude Oil & Product; Natural Gas & Product; Hydro Power; Geothermal; Biomass and Total

2015 Handbook of Energy & Economic Statistics of Indonesia | 3

3.2. Final Energy Cosumption by Sector

3.2.1. Energy Consumption (Included Biomass)

(BOE)

Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*)	2013*)	2014
Industrial	251,895,942	252,158,714	245,108,900	275,308,517	263,294,377	262,686,505	280,187,757	300,675,120	309,872,959	297,271,113	355,412,885	359,809,663	376,159,363	398,310,120	433,584,901
Households	296,573,110	301,347,223	303,032,794	309,046,165	314,114,684	313,772,025	312,715,871	319,333,000	316,802,419	317,055,653	310,548,074	323,355,711	349,084,289	360,016,142	369,893,470
Commercial	20,670,389	21,449,843	21,752,300	22,397,122	25,412,327	26,234,764	26,194,683	27,896,499	29,273,897	30,848,294	33,122,376	32,928,146	35,200,167	37,308,106	38,112,729
Transportation	139,178,658	148,259,584	151,498,823	156,232,909	178,374,391	178,452,407	170,127,492	179,144,177	196,941,689	224,883,086	255,568,629	277,404,656	308,235,640	323,304,451	334,202,726
Other	29,213,878	30,585,607	29,998,546	28,445,436	31,689,809	29,102,166	25,936,873	24,912,051	25,855,949	27,186,782	28,743,347	24,816,386	25,055,850	23,255,126	20,157,451
Non Energy Utilization	40,393,109	48,524,092	48,534,290	48,317,775	62,375,806	54,352,999	64,990,106	64,759,190	73,847,398	84,096,759	84,146,777	98,284,711	111,081,769	94,531,056	96,844,996
Final Energy Consumption	777,925,086	802,325,064	799,925,653	839,747,924	875,261,394	864,600,867	880,152,782	916,720,038	952,594,312	981,341,686	1,067,542,087	1,116,599,274	1,204,817,077	1,236,725,000	1,292,796,273

3.2.2. Commercial Energy Consumption (Excluded Biomass)

(BOE)

Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*)	2013*)	2014
Industrial	192,914,655	196,972,955	192,803,789	225,141,109	216,377,677	218,766,032	233,511,599	258,567,087	255,304,315	252,750,040	312,095,602	316,085,936	333,427,610	353,911,328	388,397,265
Households	87,963,563	89,023,979	86,568,222	88,669,268	90,689,214	89,065,250	84,529,554	87,716,652	84,558,014	80,832,849	81,632,635	85,426,266	92,489,973	99,687,947	106,398,267
Commercial	19,218,814	20,005,525	20,315,203	20,967,212	23,989,565	24,819,117	24,786,114	26,494,973	27,879,379	29,460,747	31,741,767	31,554,440	33,833,330	35,948,103	36,759,526
Transportation	139,178,658	148,259,584	151,498,823	156,232,909	178,374,391	178,452,407	170,127,492	179,144,177	196,941,689	224,883,086	255,568,629	277,404,656	308,235,640	323,304,451	334,202,726
Other	29,213,878	30,585,607	29,998,546	28,445,436	31,689,809	29,102,166	25,936,873	24,912,051	25,855,949	27,186,782	28,743,347	24,816,386	25,055,850	23,255,126	20,157,451
Non Energy Utilization	40,393,109	48,524,092	48,534,290	48,317,775	62,375,806	54,352,999	64,990,106	64,759,190	73,479,806	84,096,759	84,146,777	98,284,711	111,081,769	94,531,056	96,844,996
Final Energy Consumption	508,882,677	533,371,742	529,718,873	567,773,708	603,496,463	594,557,972	603,881,738	641,594,130	664,019,151	699,210,263	793,928,757	833,572,396	904,124,172	930,638,011	982,760,231

Note : *) Revised Data

2015 Handbook of Energy & Economic Statistics of Indonesia | 3

3.3. Final Energy Consumption by Type

(Thousand BOE)

Year	Biomass	Coal	Natural Gas	Fuel		Other Petro-leum Product	Briquette	LPG	Electricity	Total
2000	269,042	36,060	87,214	315,272		13,435	85	8,261	48,555	777,925
2001	268,953	37,021	82,235	328,203		25,712	78	8,280	51,841	802,325
2002	270,207	38,698	80,885	325,202		22,688	83	8,744	53,418	799,926
2003	271,974	68,264	90,277	321,384		23,533	77	8,766	55,473	839,748
2004	271,765	55,344	85,459	354,317		37,716	80	9,187	61,393	875,261
2005	270,043	65,744	86,634	338,375		29,614	94	8,453	65,644	864,601
2006	276,271	89,043	83,221	311,913		41,126	94	9,414	69,071	880,153
2007	275,126	121,904	80,178	314,248		39,873	89	10,925	74,376	916,720
2008	277,874	94,035	102,281	320,987		16,658	155	15,718	79,138	906,846
2009	279,169	82,587	118,587	335,271		55,663	220	24,384	82,499	978,380
2010	273,613	136,733	115,404	363,130		55,765	123	32,067	90,707	1,067,542
2011	283,027	144,502	121,234	363,827		69,978	121	37,060	96,849	1,116,599
2012*)	300,693	155,915	125,074	391,531		81,934	130	42,883	106,656	1,204,817
2013**)	306,087	178,905	125,529	397,223		66,161	56	47,801	114,962	1,236,725
2014	310,036	220,639	124,467	396,214		67,697	58	51,942	121,743	1,292,796

Note : *) Revised Data for Biomass, Fuel and Total.
**) Revised Data for Biomass, Coal, Fuel, Other Petroleum Product, Briquette and Total

3.4. Share of Final Energy Consumption by Sector

(%)

Year	Industry	Household	Commercial	Transportation	Other
2000	41.18	18.78	4.10	29.71	6.24
2001	40.63	18.36	4.13	30.58	6.31
2002	40.07	17.99	4.22	31.48	6.23
2003	43.34	17.07	4.04	30.08	5.48
2004	39.99	16.76	4.43	32.96	5.86
2005	40.50	16.49	4.59	33.03	5.39
2006	43.33	15.69	4.60	31.57	4.81
2007	44.83	15.21	4.59	31.06	4.32
2008	43.23	14.32	4.72	33.35	4.38
2009	44.22	14.06	4.64	32.78	4.30
2010	41.09	13.14	4.79	36.56	4.42
2011	42.99	11.62	4.29	37.73	3.38
2012*)	42.04	11.66	4.27	38.87	3.16
2013*)	42.33	11.92	4.30	38.67	2.78
2014	43.84	12.01	4.15	37.72	2.28

Note : Commercial Energy (Excluded Biomass)
*) Revised Data

3.5. Share of Final Energy Consumption by Type

(%)

Year	Coal	Natural Gas	Fuel	LPG	Electricity
2000	7.3	17.6	63.6	1.7	9.8
2001	7.3	16.2	64.7	1.6	10.2
2002	7.6	16.0	64.1	1.7	10.5
2003	12.6	16.6	59.1	1.6	10.2
2004	9.8	15.1	62.6	1.6	10.9
2005	11.7	15.3	59.9	1.5	11.6
2006	15.8	14.8	55.4	1.7	12.3
2007	20.3	13.3	52.2	1.8	12.4
2008	15.4	16.7	52.4	2.6	12.9
2009	12.9	18.4	52.1	3.8	12.8
2010	18.5	15.6	49.2	4.3	12.3
2011	18.9	15.9	47.7	4.9	12.7
2012*)	19.0	15.2	47.6	5.2	13.0
2013*)	20.7	14.5	45.9	5.5	13.3
2014	24.1	13.6	43.3	5.7	13.3

Note : Excluded Biomass
*) Revised Data

4

ENERGY PRICES

4.1. Crude Oil Price

(US$ per Barel)

Crude Oil Type	2000	2001	2002	2003		2004	2005	2006	2007	2008	2009
SLC	28.53	23.99	25.11	29.04		36.30	53.92	64.24	72.94	99.90	64.14
Arjuna	28.65	24.29	24.35	28.81		36.90	55.07	65.52	72.38	97.61	61.18
Arun Condensate	28.92	24.40	24.65	29.16		37.40	54.62	64.85	72.94	94.27	60.33
Attaka	29.09	24.75	24.89	29.41		37.60	57.51	67.59	75.69	101.03	62.74
Cinta	27.83	23.15	24.08	28.09		35.00	51.81	61.77	70.33	94.58	59.74
Duri	27.09	22.02	23.30	27.11		30.40	46.62	54.93	59.89	84.57	55.12
Handil Mix	n/a	24.42	24.48	28.96		37.10	55.23	65.67	72.53	97.77	61.33
Lalang	n/a	24.04	25.16	29.09		36.40	53.13	64.29	72.99	99.95	64.19
Widuri	27.87	23.10	24.08	28.05		35.00	51.19	61.94	70.41	94.98	59.72
Belida	29.07	24.74	24.74	29.19		37.30	56.54	67.56	75.71	101.05	62.30
Senipah Condensate	29.05	24.40	24.65	29.17		39.95	54.62	65.57	73.03	94.27	60.33
Average	28.39	21.94	22.46	26.34		36.39	53.66	64.27	72.31	96.13	61.58

4.1. Crude Oil Price (continued)

(US$ per Barrel)

Crude Oil Type	2010	2011	2012	2013		2014
SLC	81.44	113.63	115.59	108.15		98.63
Arjuna	78.91	112.47	111.75	104.23		94.82
Attaka	80.75	114.38	114.47	107.57		97.96
Cinta	77.02	110.50	114.07	106.51		96.83
Duri	75.07	107.57	112.31	104.44		94.67
Widuri	77.12	110.55	114.16	106.05		97.03
Belida	80.28	114.14	115.19	109.69		99.63
Senipah Condensate	78.76	109.02	108.97	106.48		98.25
Anoa	81.15	114.78	114.87	107.97		98.36
Arun Condensate	78.76	109.02	108.97	106.48		98.25
Badak	80.75	114.38	114.47	107.57		97.96
Average	79.40	111.55	112.73	105.85		96.51

Sources : Oil and Gas Statistics, Directorate General of Oil and Gas

4.2. International Gas Price

(US$/MMBTU)

Year	LNG	Natural Gas			
	CIF on Japan	CIF on Uni Eropa	UK (Heren NBP Index)	USA (Henry Hub)	Canada (Alberta)
2000	4.72	4.32	2.71	4.23	3.75
2001	4.64	3.66	3.17	4.07	3.61
2002	4.27	3.23	2.37	3.33	2.57
2003	4.77	4.06	3.33	5.63	4.83
2004	5.18	4.32	4.46	5.85	5.03
2005	6.05	5.88	7.38	8.79	7.25
2006	7.14	7.85	7.87	6.76	5.83
2007	7.73	8.03	6.01	6.95	6.17
2008	12.55	11.56	10.79	8.85	7.99
2009	9.06	8.52	4.85	3.89	3.38
2010	10.91	8.01	6.56	4.39	3.69
2011	14.73	10.61	9.03	4.01	3.47
2012	16.75	11.03	9.46	2.76	2.27
2013	16.17	10.72	10.63	3.71	2.93
2014	16.33	9.11	8.22	4.35	3.87

Source : BP Statistical Review of World Energy, 2015

4.3. Average Price of LPG, LNG and Coal FOB Export

Year	LPG	LNG	Coal*)
	US $/Thousand Tons	US $/MMBTU	US$/Ton
2000	252.97	4.31	29.60
2001	246.41	4.45	32.07
2002	278.42	4.84	29.98
2003	332.52	6.00	28.63
2004	443.02	7.19	43.00
2005	479.82	8.49	36.48
2006	624.40	9.04	40.99
2007	785.94	11.97	54.76
2008	785.94	11.97	54.76
2009	545.49	6.95	63.85
2010	0.00	7.79	72.35
2011	0.00	11.80	95.91
2012	0.00	12.58	88.36
2013	0.00	11.90	75.42
2014	0.00	9.93	66.30

Sources : Directorate General of Oil and Gas, Bank Indonesia and Ministry of Trade
Note : *) Revised Data for 2009 - 2013

2015 Handbook of Energy & Economic Statistics of Indonesia | 4

4.4. Energy Price per Energy Unit

Year	Gasoline (Premium)		Avtur		Avgas		Kerosene		ADO		IDO		Fuel Oil		LPG (3 Kg)	
	Rp/ BOE	US $/ BOE	Rp/ BOE	US $/ BOE	Rp/ BOE	US $/ BOE	Rp/ BOE	US $/ BOE	Rp/ BOE	US $/ BOE	Rp/BOE	US$/BOE	Rp/BOE	US $/ BOE	Rp/ BOE	US $/ BOE
2000	178,035	18.55	179,945	18.75	306,141	31.91	50,191	5.23	86,711	9.04	77,560	8.08	52,074	5.43	0.0	0.00
2001	225,368	21.67	332,728	31.99	884,207	85.02	63,640	6.12	117,669	11.31	139,292	13.39	98,702	9.49	0.0	0.00
2002	248,820	27.83	354,797	39.69	766,613	85.75	67,483	7.55	138,737	15.52	194,215	21.72	150,357	16.82	0.0	0.00
2003	313,707	37.06	601,287	71.03	1,150,909	135.96	309,087	36.51	260,228	30.74	289,935	34.25	222,902	26.33	0.0	0.00
2004	310,596	33.43	580,746	62.51	1,118,885	120.44	303,674	32.69	254,351	27.38	310,239	33.39	227,810	24.52	0.0	0.00
2005	492,028	50.05	806,228	82.02	2,067,906	210.37	398,713	40.56	406,962	41.40	585,398	59.55	394,879	40.17	0.0	0.00
2006	772,201	85.61	974,757	108.07	2,423,480	268.68	337,416	37.41	662,854	73.49	829,863	92.00	513,974	56.98	0.0	0.00
2007	772,201	81.98	1,048,206	111.29	2,849,871	302.57	337,416	35.82	662,854	70.37	887,504	94.22	577,206	61.28	498.6	0.05
2008	911,626	83.25	1,561,727	142.62	4,246,083	387.77	386,623	35.31	766,264	69.98	1,311,550	119.78	853,622	77.96	498.6	0.05
2009	858,001	82.85	949,203	91.66	3,277,120	316.44	421,770	40.73	739,930	71.45	n.a.	n.a.	n.a.	n.a.	498.6	0.05
2010	772,201	85.06	1,123,989	123.81	4,092,892	450.86	421,770	46.46	693,684	76.41	n.a.	n.a.	n.a.	n.a.	498.6	0.05
2011	772,201	85.16	1,455,486	160.51	3,540,632	390.45	421,770	46.51	693,684	76.50	n.a.	n.a.	n.a.	n.a.	498.6	0.05
2012	772,201	63.35	1,591,196	130.54	4,003,697	328.47	421,770	34.60	693,684	56.91	n.a.	n.a.	n.a.	n.a.	498.6	0.04
2013	943,801	77.43	1,693,547	138.94	4,339,184	355.99	421,770	34.60	770,760	63.23	n.a.	n.a.	n.a.	n.a.	498.6	0.04
2014*)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Note : Based on Current Price
*) Fuel Price Data 2014 not Longer Available

2015 Handbook of Energy & Economic Statistics of Indonesia | 4

4.4. Energy Price per Energy Unit (continued)

Year	LPG (12 Kg)		LPG (50 Kg)		Average of Refinery Product		Coal		Electricity (Average)					
									Household		Industry		Commercial	
	Rp/BOE	US$/BOE	Rp/BOE	US$/BOE	Rp/BOE	US $/BOE	Rp/BOE	US $/BOE	Rp/BOE	US $/BOE	Rp/BOE	US $/BOE	Rp/BOE	US $/BOE
2000	246.3	0.03	246.3	0.03	116,363	12.13	35,961	3.75	338,238	35.25	493,507	51.43	620,734	64.69
2001	246.3	0.02	246.3	0.02	232,732	22.38	46,673	4.49	413,785	39.79	590,000	56.73	737,210	70.89
2002	281.5	0.03	281.5	0.03	240,163	26.86	51,384	5.75	640,767	71.67	722,577	80.83	966,998	108.17
2003	334.3	0.04	334.3	0.04	393,549	46.49	53,973	6.38	852,333	100.69	865,122	102.20	1,078,972	127.46
2004	351.9	0.04	351.9	0.04	388,332	41.80	53,956	5.81	909,886	97.94	912,153	98.19	1,113,083	119.82
2005	498.6	0.05	498.6	0.05	644,077	65.52	58,820	5.98	918,515	93.44	929,641	94.57	1,133,295	115.29
2006	498.6	0.06	498.6	0.06	814,380	90.29	78,523	8.71	926,020	102.66	1,013,442	112.35	1,092,023	121.07
2007	498.6	0.05	845.1	0.09	891,970	94.70	79,212	8.41	932,724	99.03	1,013,573	107.61	1,260,212	133.79
2008	662.9	0.06	859.7	0.08	1,254,770	114.59	78,523	8.71	926,020	102.66	1,013,442	112.35	1,092,023	121.07
2009	686.2	0.07	859.7	0.08	780,815	75.40	114,397	10.45	959,231	87.60	1,014,741	92.67	1,387,403	126.70
2010	686.2	0.08	1,315.8	0.14	888,129	97.83	153,559	17.08	1,004,763	111.75	1,078,287	119.93	1,524,176	169.52
2011	686.2	0.08	862.8	0.10	860,534	94.90	163,359	18.01	1,008,075	111.17	1,134,519	125.11	1,551,468	171.09
2012	686.2	0.06	1,315.8	0.11	935,381	76.74	174,489	18.04	1,030,440	106.56	1,158,091	119.76	1,574,551	162.83
2013	747.2	0.06	1,315.8	0.13	1,021,195	83.78	219,464	18.01	1,128,972	92.62	1,299,103	106.58	1,821,501	149.44
2014*)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	234,883	18.88	1,236,803	99.42	1,595,057	128.22	2,065,041	166.00

Note : Based on Current Price
*) LPG, Refinery Product Price Data 2014 not Longer Available

4.5. Average Price of Coal Import

Year	Import Value (CIF) *)	Import Volume **)	Import Price (CIF) *)
	US $	Ton	US $/Ton
2000	5,837,447	140,116	41.66
2001	2,004,976	30,466	65.81
2002	1,627,954	20,026	81.29
2003	5,732,026	38,228	149.94
2004	15,204,824	97,183	156.46
2005	12,891,514	98,179	131.31
2006	13,455,025	110,683	121.56
2007	8,880,440	67,534	131.50
2008	23,549,197	106,931	220.23
2009	16,057,630	68,804	325.71
2010	21,672,318	55,230	351.05
2011	25,644,956	42,449	410.70
2012	38,807,116	98,973	392.10
2013	38,669,821	129,581	298.42
2014	60,326,540	257,093	234.65

Source : Ministry of Trade
Note : *) Revised Data for 2009 - 2013
**) Revised Data for 2012 - 2013

5
ENERGY DEMAND BY SECTORS

5.1.1. Energy Consumption in Industrial Sector

(in Original Unit)

Year	Biomass	Coal	Briquette	Gas	Fuel		Fuel			Other Petroleum Product	LPG	Electricity
					Kerosene	ADO	IDO	Fuel Oil	Total Fuel			
	Thousand Ton			MMSCF	Kilo Liter						Thousand Ton	GWh
2000	25,667	8,586	24	483,438	711,774	5,729,941	1,211,930	3,674,761	11,328,406	2,094,316	126	34,013
2001	24,016	8,815	22	455,798	701,791	6,082,584	1,170,511	3,832,704	11,787,590	4,008,106	114	35,593
2002	22,762	9,214	23	448,261	667,247	5,985,416	1,106,467	3,676,959	11,436,088	3,536,732	128	36,831
2003	21,832	16,253	22	500,622	671,513	5,764,971	962,232	2,981,697	10,380,414	3,668,380	95	36,497
2004	20,417	13,177	23	473,695	676,827	6,626,385	887,061	3,140,129	11,330,403	5,879,216	129	40,324
2005	19,113	15,653	26	480,382	649,626	6,155,112	732,888	2,243,407	9,781,033	4,616,280	133	42,448
2006	20,313	21,201	27	461,277	572,676	5,399,470	397,599	2,320,623	8,690,367	6,410,874	170	43,615
2007	18,325	29,025	25	443,889	565,550	5,208,388	215,233	1,990,450	7,979,620	6,215,568	146	45,803
2008	19,250	22,389	43	623,616	451,457	5,735,356	128,424	1,430,903	7,746,140	8,117,302	132	47,969
2009	19,375	19,664	62	654,428	273,095	6,349,977	111,242	1,204,418	7,938,732	8,676,804	69	46,204
2010	18,851	32,555	35	635,361	162,577	6,663,702	134,607	1,798,635	8,759,521	8,692,820	77	50,985
2011	19,028	34,405	34	666,195	113,409	5,627,864	99,193	1,165,728	7,006,194	10,908,408	73	54,725
2012 *)	18,596	37,123	36	685,751	78,987	5,561,064	72,907	1,269,216	6,982,175	12,772,090	73	60,176
2013 **)	19,321	42,596	16	689,312	72,018	5,153,722	62,987	730,651	6,019,378	10,313,467	81	64,381
2014	19,665	52,533	16	683,177	55,503	4,237,700	48,449	697,388	5,039,039	10,552,828	88	65,909

Note : *) Revised Data for Biomass, Coal, ADO, IDO and Fuel Oil
**) Revised Data for Biomass, Briquette, Gas, ADO, IDO, Fuel Oil and Other Petroleum Product

2015 Handbook of Energy & Economic Statistics of Indonesia | 5

5.1.2. Energy Consumption in Industrial Sector

(in Energy Unit)

(Thousand BOE)

Year	Biomass	Coal	Briquette	Gas	Fuel					Other Petroleum Product	LPG	Electricity	Total
					Kerosene	ADO		IDO	Fuel Oil	Total Fuel				
2000	58,981	36,060	85	86,826	4,219	37,171		8,008	25,581	74,979	13,435	1,073	20,850	292,289
2001	55,186	37,021	78	81,861	4,160	39,458		7,735	26,680	78,033	25,712	972	21,819	300,683
2002	52,305	38,698	83	80,508	3,955	38,828		7,311	25,596	75,690	22,688	1,093	22,578	293,643
2003	50,167	68,264	77	89,912	3,980	37,398		6,358	20,756	68,493	23,533	808	22,373	323,626
2004	46,917	55,344	80	85,076	4,012	42,986		5,862	21,859	74,718	37,716	1,101	24,719	325,670
2005	43,920	65,744	94	86,277	3,851	39,929		4,843	15,617	64,239	29,614	1,131	26,021	317,040
2006	46,676	89,043	94	82,845	3,394	35,027		2,627	16,154	57,203	41,126	1,453	26,736	345,178
2007	42,108	121,904	89	79,723	3,352	33,787		1,422	13,856	52,418	39,873	1,242	28,077	365,434
2008	44,235	94,035	155	101,668	2,676	37,206		849	9,961	50,691	16,658	1,124	29,405	337,972
2009	44,521	82,587	220	117,535	1,619	41,193		735	8,384	51,931	55,663	588	28,323	381,368
2010	43,317	136,733	123	114,111	964	43,228		889	12,521	57,602	55,765	655	31,254	439,560
2011	43,724	144,502	121	119,649	672	36,509		655	8,115	45,951	69,978	623	33,547	458,094
2012 *)	42,732	155,915	130	123,161	468	36,075		482	8,835	45,860	81,934	621	36,888	487,241
2013 **)	44,399	178,905	130	123,800	427	33,433		416	5,086	39,362	66,161	693	39,466	492,841
2014	45,188	220,639	58	122,699	329	27,490		320	4,855	32,994	67,697	753	40,402	530,430

Note : *) Revised Data for Biomass, Coal, ADO, IDO and Fuel Oil
**) Revised Data for Biomass, Briquette, Gas, ADO, IDO, Fuel Oil and Other Petroleum Product

5.1.3. Share of Energy Consumption in Industrial Sector

(%)

Year	Coal	Briquette	Gas	Fuel		Fuel		Other Petroleum Product	LPG	Electricity
				Kerosene	ADO	IDO	Fuel Oil			
2000	15.46	0.04	37.22	1.81	15.93	3.43	10.96	5.76	0.46	8.94
2001	15.08	0.03	33.35	1.69	16.07	3.15	10.87	10.47	0.40	8.89
2002	16.03	0.03	33.36	1.64	16.09	3.03	10.61	9.40	0.45	9.36
2003	24.96	0.03	32.88	1.46	13.68	2.33	7.59	8.61	0.30	8.18
2004	19.85	0.03	30.52	1.44	15.42	2.10	7.84	13.53	0.39	8.87
2005	24.07	0.03	31.59	1.41	14.62	1.77	5.72	10.84	0.41	9.53
2006	29.83	0.03	27.75	1.14	11.73	0.88	5.41	13.78	0.49	8.96
2007	37.70	0.03	24.66	1.04	10.45	0.44	4.29	12.33	0.38	8.68
2008	32.01	0.05	34.61	0.91	12.67	0.29	3.39	5.67	0.38	10.01
2009	24.52	0.07	34.89	0.48	12.23	0.22	2.49	16.52	0.17	8.41
2010	34.51	0.03	28.80	0.24	10.91	0.22	3.16	14.07	0.17	7.89
2011	34.87	0.03	28.87	0.16	8.81	0.16	1.96	16.89	0.15	8.10
2012*)	35.08	0.03	27.71	0.11	8.12	0.11	1.99	18.43	0.14	8.30
2013*)	39.89	0.01	27.61	0.10	7.46	0.09	1.13	14.75	0.15	8.80
2014	45.47	0.01	25.29	0.07	5.67	0.07	1.00	13.95	0.16	8.33

Note : *) Revised Data

5.2.1. Energy Consumption in Household Sector
(in Original Unit)

Year	Biomass	Gas	Kerosene	LPG	Electricity
	Thousand Ton	MMSCF	Kilo Liter	Thousand Ton	GWh
2000	90,783	449	10,665,049	696	30,563
2001	92,399	487	10,515,453	724	33,340
2002	94,201	535	9,997,862	748	33,994
2003	95,904	553	10,061,787	823	35,753
2004	97,230	691	10,141,412	798	38,588
2005	97,788	693	9,733,831	704	41,184
2006	99,302	711	8,580,829	788	43,753
2007	100,795	737	8,474,054	979	47,325
2008	101,068	729	6,764,523	1,592	50,184
2009	101,510	722	4,091,982	2,671	54,945
2010	99,619	751	2,436,009	3,564	59,825
2011	103,542	635	1,699,298	4,144	65,112
2012*)	111,665	748	1,183,526	4,824	72,133
2013*)	113,290	681	1,079,100	5,377	77,211
2014	114,668	636	831,641	5,843	84,086

Note : *) Revised Data for Biomass

5.2.2. Energy Consumption in Household Sector
(in Original Unit)

(Thousand BOE)

Year	Biomass	Gas	Kerosene	LPG	Electricity	Total
2000	208,610	81	63,216	5,932	18,735	296,573
2001	212,323	87	62,329	6,170	20,437	301,347
2002	216,465	96	59,261	6,373	20,838	303,033
2003	220,377	99	59,640	7,013	21,917	309,046
2004	223,425	124	60,112	6,798	23,655	314,115
2005	224,707	124	57,696	5,998	25,246	313,772
2006	228,186	128	50,862	6,719	26,821	312,716
2007	231,616	132	50,229	8,345	29,010	319,333
2008	232,244	131	40,096	13,568	30,763	316,802
2009	233,261	130	24,255	22,767	33,682	314,094
2010	228,915	135	14,439	30,386	36,673	310,548
2011	237,929	114	10,072	35,326	39,914	323,356
2012*)	256,594	134	7,015	41,123	44,217	349,084
2013*)	260,328	122	6,396	45,839	47,330	360,016
2014	263,495	114	4,929	49,810	51,545	369,893

Note : *) Revised Data for Biomass

5.2.3. Share of Energy Consumption in Household Sector

(%)

Year	Gas	Kerosene	LPG	Electricity
2000	0.09	71.87	6.74	21.30
2001	0.10	70.01	6.93	22.96
2002	0.11	68.46	7.36	24.07
2003	0.11	67.26	7.91	24.72
2004	0.14	66.28	7.50	26.08
2005	0.14	64.78	6.73	28.35
2006	0.15	60.17	7.95	31.73
2007	0.15	57.26	9.51	33.07
2008	0.15	47.42	16.05	36.38
2009	0.16	30.01	28.17	41.67
2010	0.17	17.69	37.22	44.92
2011	0.13	11.79	41.35	46.72
2012*)	0.15	7.58	44.46	47.81
2013*)	0.12	6.42	45.98	47.48
2014	0.11	4.63	46.81	48.45

Note : *) Revised Data

5.3.1. Energy Consumption in Commercial Sector

(in Original Unit)

Year	Biomass	Gas	Fuel				LPG	Electricity
			Kerosene	ADO	IDO	Total		
	Thousand Ton	MMSCF	Kilo Liter				Thousand Ton	GWh
2000	632	745	588,919	825,064	6,503	1,420,486	147	14,588
2001	629	821	580,658	875,842	6,281	1,462,781	134	15,587
2002	625	913	552,077	861,851	5,937	1,419,865	150	16,264
2003	622	882	555,607	830,108	5,163	1,390,878	111	18,191
2004	619	972	560,004	954,145	4,760	1,518,909	151	21,185
2005	616	1,057	537,497	886,286	3,933	1,427,715	155	23,400
2006	613	1,145	473,829	777,479	2,134	1,253,442	146	25,241
2007	610	1,526	467,933	749,965	1,155	1,219,053	157	28,119
2008	607	1,989	373,533	825,844	689	1,200,067	120	30,866
2009	604	4,067	225,957	914,345	597	1,140,899	121	33,322
2010	601	5,364	134,515	959,518	722	1,094,756	120	37,073
2011	598	7,185	93,834	810,366	532	904,733	130	38,156
2012*)	595	9,050	65,354	800,748	391	866,492	134	41,574
2013*)	592	7,915	59,587	742,094	338	802,019	149	45,820
2014	589	8,057	45,923	610,194	260	656,377	162	48,452

Note : *) Revised Data for ADO and IDO

5.3.2. Energy Consumption in Commercial Sector

(in Energy Unit)

(Thousand BOE)

Year	Bio-mass	Gas	Fuel				LPG	Electri-city	Total
			Kero-sene	ADO	IDO	Total Fuel			
2000	1,452	134	3,491	5,352	43	8,886	1,257	8,943	20,670
2001	1,444	147	3,442	5,682	42	9,165	1,138	9,555	21,450
2002	1,437	164	3,272	5,591	39	8,903	1,279	9,970	21,752
2003	1,430	158	3,293	5,385	34	8,712	946	11,151	22,397
2004	1,423	174	3,319	6,190	31	9,540	1,288	12,986	25,412
2005	1,416	190	3,186	5,749	26	8,961	1,324	14,344	26,235
2006	1,409	206	2,809	5,044	14	7,866	1,241	15,473	26,195
2007	1,402	274	2,774	4,865	8	7,646	1,337	17,237	27,896
2008	1,395	357	2,214	5,357	5	7,576	1,025	18,921	29,274
2009	1,388	730	1,339	5,931	4	7,275	1,029	20,426	30,848
2010	1,381	963	797	6,224	5	7,027	1,026	22,726	33,122
2011	1,374	1,290	556	5,257	4	5,817	1,112	23,390	32,982
2012*)	1,367	1,625	387	5,195	3	5,584	1,139	25,485	35,200
2013*)	1,360	1,422	353	4,814	2	5,169	1,269	28,088	37,308
2014	1,353	1,447	272	3,958	2	4,232	1,379	29,701	38,113

Note : *) Revised Data for ADO and IDO

5.3.3. Share of Energy Consumption in Commercial Sector

(%)

Year	Gas	Fuel			LPG	Electricity
		Kerosene	ADO	IDO		
2000	0.70	18.16	27.85	0.22	6.54	46.53
2001	0.74	17.20	28.40	0.21	5.69	47.76
2002	0.81	16.11	27.52	0.19	6.30	49.08
2003	0.76	15.71	25.68	0.16	4.51	53.18
2004	0.73	13.84	25.80	0.13	5.37	54.13
2005	0.77	12.84	23.17	0.10	5.33	57.79
2006	0.83	11.33	20.35	0.06	5.01	62.43
2007	1.03	10.47	18.36	0.03	5.05	65.06
2008	1.28	7.94	19.22	0.02	3.68	67.87
2009	2.48	4.55	20.13	0.01	3.49	69.33
2010	3.04	2.51	19.61	0.02	3.23	71.60
2011	4.08	1.76	16.63	0.01	3.52	74.00
2012*)	4.80	1.14	15.35	0.01	3.37	75.32
2013*)	3.95	0.98	13.39	0.01	3.53	78.13
2014	3.94	0.74	10.77	0.00	3.75	80.80

Note : *) Revised Data

2015 Handbook of Energy & Economic Statistics of Indonesia | 5

5.4.1. Energy Consumption in Transportation Sector

(in Original Unit)

Year	Gas	Fuel											Biofuel				Electricity
		Avgas	Avtur	RON 88	RON 92	RON 95	Solar 51	Kerosene	ADO	IDO	Fuel Oil	Total Fuel	Bio RON 88	Bio RON 92	Bio Solar	Total Biofuel	
	MMSCF	Kilo Liter							Kilo Liter								GWh
2000	968	3,550	1,202,717	12,059,026	0	0	0	4,708	9,365,388	48,356	71,474	22,755,220	0	0	0	0	44
2001	773	3,430	1,473,503	12,705,861	0	0	0	4,642	9,941,771	46,704	74,546	24,250,457	0	0	0	0	49
2002	654	3,488	1,597,291	13,323,304	0	0	0	4,414	9,782,952	44,148	71,517	24,827,114	0	0	0	0	53
2003	599	3,556	1,929,351	13,746,726	371,238	107,441	0	4,442	9,422,642	38,393	57,994	25,681,783	0	0	0	0	53
2004	471	3,416	2,437,923	15,337,655	487,562	121,866	0	4,477	10,830,594	35,394	61,075	29,319,962	0	0	0	0	55
2005	238	3,070	2,322,634	16,621,765	248,875	99,326	0	4,297	10,060,316	29,242	43,634	29,433,160	0	0	0	0	55
2006	233	3,390	2,428,078	15,941,837	505,730	128,289	1,344	3,788	8,826,588	15,864	45,136	28,117,389	1,624	16	217,048	218,688	67
2007	273	2,163	2,520,040	16,962,198	472,284	158,070	1,288	3,741	8,514,215	8,588	38,714	29,623,396	55,970	9,956	877,457	621,535	85
2008	691	2,003	2,635,670	19,112,241	297,982	114,789	1,289	2,986	9,374,239	5,124	27,831	32,564,294	44,016	16,234	931,179	991,429	81
2009	1,066	1,687	2,760,678	20,802,405	460,148	104,388	1,955	1,807	10,378,815	4,439	23,426	37,064,029	105,816	20,232	2,398,234	2,524,282	111
2010	1,088	2,231	3,527,382	22,391,362	670,364	113,812	4,434	1,075	10,891,587	5,371	34,983	42,036,462	0	0	4,393,861	4,393,861	89
2011	1,006	2,316	3,562,126	24,766,975	625,162	294,639	6,392	750	9,198,546	3,958	22,673	45,664,345	0	0	7,180,806	7,180,806	88
2012*)	856	2,606	3,898,832	27,612,171	666,461	149,424	6,392	522	9,089,365	2,909	24,686	41,459,273	0	0	9,269,482	9,269,482	108
2013**)	1,031	2,868	4,159,010	28,622,924	850,408	158,714	12,297	476	8,423,579	2,513	14,211	42,257,757	0	0	10,934,294	10,934,294	129
2014	1,152	1,499	4,229,094	28,822,039	1,062,920	154,888	23,053	367	6,926,372	1,933	13,564	41,245,982	0	0	13,667,983	13,667,983	155

Note : *) Revised Data for RON 95, ADO, IDO and Fuel Oil
**) Revised Data for RON 92, RON 95, ADO, IDO, Fuel Oil

2015 Handbook of Energy & Economic Statistics of Indonesia | 5

5.4.2. Energy Consumption in Transportation Sector

(in Energy Unit)

(Thousand BOE)

Year	Gas	Fuel											Bio Fuel				Elec-tricity	Total
		Avgas	Avtur	RON 88	RON 92	RON 95	Solar 51	Kero-sene	ADO	IDO		Fuel Oil	Total Fuel	Bio RON 88	Bio RON 92	Bio Solar	Total Biofuel		
2000	174	20	7,085	70,274	0	0	0	28	60,754	320		498	138,978	0	0	0	0	27	139,179
2001	139	19	8,680	74,043	0	0	0	28	64,493	309		519	148,091	0	0	0	0	30	148,260
2002	118	19	9,409	77,642	0	0	0	26	63,463	292		498	151,349	0	0	0	0	33	151,499
2003	108	20	11,365	80,109	2,163	626	0	26	61,126	254		404	156,093	0	0	0	0	33	156,233
2004	85	19	14,361	89,380	2,841	710	0	27	70,259	234		425	178,256	0	0	0	0	34	178,374
2005	43	17	13,682	96,863	1,450	579	0	25	65,262	193		304	178,376	0	0	0	0	34	178,452
2006	42	19	14,303	92,901	2,947	748	9	22	57,268	105		314	168,636	9	0	1,408	1,418	41	170,127
2007	49	12	14,845	98,847	2,752	921	8	22	55,241	57		269	172,975	326	58	5,692	6,076	52	179,144
2008	124	11	15,526	111,377	1,736	669	8	18	60,812	34		194	190,384	257	95	6,041	6,392	50	196,942
2009	191	9	16,262	121,226	2,682	608	13	11	67,328	29		163	208,332	617	118	15,558	16,292	68	224,883
2010	195	12	20,779	130,486	3,907	663	29	6	70,655	35		244	226,816	0	0	28,503	28,503	54	255,569
2011	181	13	20,983	144,330	3,643	1,717	41	4	59,672	26		158	230,588	0	0	46,583	337,072	54	277,405
2012*)	154	14	22,967	160,910	3,884	871	80	3	58,964	19		172	247,883	0	0	60,132	60,132	66	308,236
2013**)	185	16	24,499	166,800	4,956	925	150	3	54,645	17		99	252,109	0	0	70,932	70,932	79	323,304
2014	207	8	24,912	167,960	6,194	903	216	2	44,932	13		94	245,235	0	0	88,666	88,666	95	334,203

Note : *) Revised Data for RON 95, ADO, IDO and Fuel Oil
**) Revised Data for RON 92, RON 95, ADO, IDO, and Fuel Oil

5.4.3. Share of Energy Consumption in Transportation Sector

(%)

Year	Gas	Fuel											Bio Fuel				Electricity
		Avgas	Avtur	Premium	Pertamax	Pertamax Plus	Dex	Kerosene	ADO	IDO	Fuel Oil	Total Fuel	Bio RON 88	Bio RON 92	Bio Solar	Total Biofuel	
2000	0.125	0.014	5.090	50.492	0.000	0.000	0.000	0.020	43.652	0.230	0.357	99.856	0.000	0.000	0.000	0.000	0.019
2001	0.094	0.013	5.855	49.942	0.000	0.000	0.000	0.019	43.500	0.208	0.350	99.886	0.000	0.000	0.000	0.000	0.020
2002	0.078	0.013	6.211	51.249	0.000	0.000	0.000	0.017	41.890	0.193	0.329	99.901	0.000	0.000	0.000	0.000	0.021
2003	0.069	0.013	7.275	51.275	1.385	0.401	0.000	0.017	39.125	0.162	0.258	99.910	0.000	0.000	0.000	0.000	0.021
2004	0.047	0.011	8.051	50.108	1.593	0.398	0.000	0.015	39.389	0.131	0.238	99.934	0.000	0.000	0.000	0.000	0.019
2005	0.024	0.010	7.667	54.280	0.813	0.324	0.000	0.014	36.571	0.108	0.170	99.957	0.000	0.000	0.000	0.000	0.019
2006	0.025	0.011	8.407	54.607	1.732	0.439	0.005	0.013	33.662	0.062	0.185	99.951	0.006	0.000	0.828	0.833	0.024
2007	0.027	0.007	8.287	55.177	1.536	0.514	0.005	0.012	30.836	0.032	0.150	99.944	0.182	0.032	3.177	3.392	0.029
2008	0.063	0.006	7.884	56.553	0.882	0.340	0.004	0.009	30.878	0.017	0.098	99.912	0.130	0.048	3.067	3.246	0.025
2009	0.085	0.004	7.231	53.906	1.192	0.271	0.006	0.005	29.939	0.013	0.073	99.885	0.274	0.052	6.918	7.245	0.030
2010	0.076	0.005	8.130	51.057	1.529	0.260	0.011	0.002	27.646	0.014	0.095	99.902	0.000	0.000	11.153	11.153	0.021
2011	0.065	0.005	7.564	52.029	1.313	0.619	0.015	0.002	21.511	0.009	0.057	99.916	0.000	0.000	16.792	16.792	0.019
2012*)	0.050	0.005	7.451	52,204	1.260	0.283	0.026	0.001	19.129	0.006	0.056	80,420	0.000	0.000	19.508	19.508	0.022
2013*)	0.057	0.005	7.578	51.592	1.533	0.286	0.046	0.001	16.902	0.005	0.031	77,979	0.000	0.000	21.940	21.940	0.024
2014	0.060	0.002	7.454	50,257	1.853	0.270	0.065	0.001	13,445	0.004	0.028	73.379	0.000	0.000	26.530	26.530	0.028

Note : *) Revised Data

5.5.1. Energy Consumption in Others Sector

(in Original Unit)

Year	Mogas	Kerosene	ADO	IDO	Fuel Oil	Total Fuel
	Kilo Liter					
2000	370,265	487,325	2,906,942	181,019	590,966	4,536,516
2001	390,125	480,490	3,085,847	174,832	616,365	4,747,660
2002	409,084	456,839	3,036,551	165,266	591,319	4,659,059
2003	422,084	459,760	2,924,714	143,723	479,509	4,429,790
2004	470,933	463,398	3,361,731	132,495	504,987	4,933,544
2005	510,361	444,774	3,122,642	109,467	360,779	4,548,023
2006	489,484	392,089	2,739,286	59,387	373,197	4,053,443
2007	520,813	387,211	2,642,345	32,148	320,099	3,902,616
2008	586,829	309,096	2,909,690	19,182	230,114	4,054,911
2009	638,725	186,978	3,221,502	16,616	193,691	4,257,511
2010	687,512	111,310	3,380,662	20,105	289,252	4,488,842
2011	760,454	77,647	2,855,156	14,816	187,469	3,895,542
2012*)	847,814	54,080	2,821,267	10,890	204,112	3,938,162
2013*)	878,849	49,308	2,614,612	9,408	117,501	3,669,678
2014	889,962	38,001	2,149,891	7,236	112,152	3,192,242

Note : *) Revised Data for ADO, IDO and Fuel Oil

5.5.2. Energy Consumption in Others Sector

(in Energy Unit)

(Thousand BOE)

Year	Mogas	Kerosene	ADO	IDO	Fuel Oil	Total Fuel
2000	2,158	2,889	18,858	1,196	4,114	29,214
2001	2,273	2,848	20,018	1,155	4,291	30,586
2002	2,384	2,708	19,698	1,092	4,116	29,999
2003	2,460	2,725	18,973	950	3,338	28,445
2004	2,744	2,747	21,808	875	3,515	31,690
2005	2,974	2,636	20,257	723	2,511	29,102
2006	2,852	2,324	17,770	392	2,598	25,937
2007	3,035	2,295	17,141	212	2,228	24,912
2008	3,420	1,832	18,875	127	1,602	25,856
2009	3,722	1,108	20,898	110	1,348	27,187
2010	4,006	660	21,931	133	2,014	28,743
2011	4,432	460	18,522	98	1,305	24,816
2012*)	4,941	321	18,302	72	1,421	25,056
2013*)	5,121	292	16,961	62	818	23,255
2014	5,157	225	13,947	48	781	20,157

Note : *) Revised Data for ADO, IDO and Fuel Oil

5.5.3. Share of Energy Consumption in Others Sector

(%)

Year	Mogas	Kerosene	ADO	IDO	Fuel Oil
2000	7.39	9.89	64.55	4.09	14.08
2001	7.43	9.31	65.45	3.78	14.03
2002	7.95	9.03	65.66	3.64	13.72
2003	8.65	9.58	66.70	3.34	11.73
2004	8.66	8.67	68.82	2.76	11.09
2005	10.22	9.06	69.61	2.49	8.63
2006	11.00	8.96	68.51	1.51	10.02
2007	12.18	9.21	68.81	0.85	8.94
2008	13.23	7.09	73.00	0.49	6.20
2009	13.69	4.08	76.87	0.40	4.96
2010	13.94	2.30	76.30	0.46	7.01
2011	17.86	1.85	74.63	0.39	5.26
2012*)	19.72	1.28	73.04	0.29	5.67
2013*)	22.02	1.26	72.94	0.27	3.52
2014	25.58	1.12	69.19	0.24	3.87

Note : *) Revised Data

6

ENERGY SUPPLY BY ENERGY RESOURCES

6.1.1. Coal Reserves

per 1 January 2014

(Million Ton)

Province	Resources					Reserves
	Hypo-thetic	Inferred	Indicated	Mea-sured	Total	
Banten	5.47	5.75	4.86	2.72	18.80	-
West Java	0.00	0.00	0.00	0.00	0.00	0.00
Central Java	0.00	0.82	0.00	0.00	0.82	-
East Java	0.00	0.08	0.00	0.00	0.08	-
Nanggroe Aceh Darussalam	0.00	346.35	13.89	90.40	450.64	0.00
North Sumatera	0.25	7.00	0.00	19.97	27.22	0.00
Riau	12.79	243.12	643.82	900.34	1,800.07	687.83
West Sumatera	20.41	294.50	231.16	249.45	795.52	158.43
Bengkulu	0.00	2.12	118.81	71.14	192.07	18.95
Jambi	691.27	865.19	452.99	213.97	2,223.42	323.89
South Sumatera	12,409.88	12,442.27	14,897.18	10,476.98	50,226.31	11,998.27
Lampung	0.00	106.95	0.00	0.94	107.89	0.00
North Kalimantan*)	51.21	580.09	383.57	714.51	1,729.38	657.31
West Kalimantan	2.06	477.69	6.85	4.70	491.50	0.00
Central Kalimantan	222.24	1,801.49	651.91	750.98	3,426.61	559.05
South Kalimantan	0.00	8,126.46	3,484.85	4,865.70	16,477.01	3,645.26
East Kalimantan	6,088.84	10,960.69	8,167.78	21,233.52	46,450.84	14,449.50
South Sulawesi	0.00	48.81	129.22	53.09	231.12	0.12
Central Sulawesi	0.00	1.98	0.00	0.00	1.98	0.00
North Maluku	8.22	0.00	0.00	0.00	8.22	0.00
West Irian Jaya	93.66	32.82	0.00	0.00	126.48	0.00
Papua	7.17	2.16	0.00	0.00	9.33	0.00
Total	**19,452.21**	**36,510.81**	**29,311.47**	**39,522.06**	**124,796.74**	**32,269.01**

Source : Geological Agency
Note : *) New Province

6.1.2. Coal Supply

(Ton)

Year	Production			Export	Import
	Steam Coal	Antracite	Total		
2000	77,014,956	25,229	77,040,185	58,460,492	140,116
2001	92,499,653	40,807	92,540,460	65,281,086	30,466
2002	103,286,403	42,690	103,329,093	74,177,926	20,026
2003	114,274,048	3,952	114,278,000	85,680,621	38,228
2004	132,352,025	0	132,352,025	93,758,806	97,183
2005	152,722,438	0	152,722,438	110,789,700	98,179
2006	193,761,311	0	193,761,311	143,632,865	110,683
2007	216,946,699	0	216,946,699	163,000,000	67,534
2008	240,249,968	0	240,249,968	191,430,218	106,931
2009	256,181,000	0	256,181,000	198,366,000	68,804
2010	275,164,196	0	275,164,196	208,000,000	55,230
2011	353,270,937	0	353,270,937	272,671,351	42,449
2012	385,899,100	0	385,899,100	304,051,216	77,786
2013*)	449,080,263	0	449,080,263	328,743,907	644,419
2014	458,096,707	0	458,096,707	381,972,830	2,538,507

Sources : 1. Directorate General of Mineral and Coal
2. Ministry of Trade
Note : *) Revised Data for Coal Import

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.1.3. Indonesia Coal Export by Destination

(Thousand Ton)

Year	China	India	Japan	Korea	Taiwan	Hongkong	Malaysia		Philippines	Thailand	Spain	Others	Total
2000	n.a.	n.a.	13,177.44	n.a.	13,519.59	n.a.	n.a.		n.a.	n.a.	n.a.	31,763.46	58,460.49
2001	n.a.	n.a.	15,216.26	n.a.	11,506.81	n.a.	n.a.		n.a.	n.a.	n.a.	38,558.02	65,281.09
2002	n.a.	n.a.	16,529.76	n.a.	13,099.99	n.a.	n.a.		n.a.	n.a.	n.a.	44,548.19	74,177.93
2003	n.a.	n.a.	17,992.18	n.a.	14,144.14	n.a.	n.a.		n.a.	n.a.	n.a.	53,544.30	85,680.62
2004	n.a.	n.a.	19,013.41	n.a.	16,677.88	n.a.	n.a.		n.a.	n.a.	n.a.	58,067.51	93,758.81
2005	n.a.	n.a.	24,237.43	n.a.	14,524.21	n.a.	n.a.		n.a.	n.a.	n.a.	72,028.06	110,789.70
2006	4,089.50	10,845.57	23,128.07	10,925.40	17,070.46	9,372.74	5,293.23		3,088.59	4,313.16	4,232.43	51,273.73	143,632.86
2007	8,570.34	13,794.87	24,323.13	13,688.09	18,112.19	11,061.38	6,000.11		3,171.98	5,724.61	3,321.96	55,231.32	163,000.00
2008	8,394.33	14,683.48	26,947.65	15,035.35	14,887.12	10,936.36	7,107.39		4,384.96	8,429.19	3,882.19	76,742.22	191,430.22
2009	27,265.55	20,784.42	25,261.61	18,361.91	17,237.74	9,663.56	8,498.79		4,438.90	7,467.79	4,500.07	54,885.64	198,366.00
2010	44,056.10	18,640.22	25,776.34	20,643.16	14,590.12	9,415.12	11,307.31		7,247.62	7,174.71	2,128.34	47,020.94	208,000.00
2011	50,347.36	30,976.14	26,073.35	18,899.51	16,517.09	10,659.58	12,407.21		6,828.44	7,391.18	4,076.83	88,494.66	272,671.35
2012	68,821.08	31,647.65	25,738.31	16,541.99	16,390.65	10,668.73	13,459.35		7,129.80	5,720.71	6,207.86	101,725.09	304,051.22
2013	49,859.07	41,834.12	21,709.23	13,635.24	14,398.81	4,990.32	9,066.31		7,608.77	5,253.32	796.19	159,592.52	328,743.91
2014	67,807.35	60,283.81	31,231.75	20,169.99	15,689.48	13,697.47	10,771.72		10,273.55	8,496.73	5,674.61	137,876.37	381,972.83

Source : Directorate General of Mineral and Coal

6.1.4. Coal Sales

(Ton)

Year	Total	Iron & Steel	Power Plant	Ceramic & Cement	Pulp & Paper*)	Bri-quette**)	Others*)
2000	22,340,845	30,893	13,718,285	2,228,583	780,676	36,799	5,545,609
2001	27,387,916	220,666	19,517,366	5,142,737	822,818	31,265	2,628,333
2002	29,257,003	236,802	20,018,456	4,684,970	499,585	24,708	3,792,481
2003	39,273,851	201,907	22,995,614	4,773,621	1,704,498	24,976	9,573,234
2004	36,081,734	119,181	22,882,190	5,549,309	1,160,909	22,436	6,347,709
2005	41,350,736	221,309	25,669,226	5,152,162	1,188,323	28,216	9,091,501
2006	48,995,069	299,990	27,758,317	5,300,552	1,216,384	36,018	14,383,808
2007	61,470,000	282,730	32,420,000	6,443,864	1,526,095	25,120	20,772,192
2008	53,473,252	245,949	31,041,000	6,842,403	1,251,000	43,000	14,049,899
2009	56,295,000	256,605	36,570,000	6,900,000	1,170,000	61,463	11,336,932
2010	67,000,000	335,000	34,410,000	6,308,000	1,742,000	34,543	24,170,457
2011	79,557,800	166,034	45,118,519	5,873,144	n.a.	33,939	28,366,165
2012	89,974,514	289,371	52,815,519	6,642,130	1,570,701	36,383	28,620,411
2013	97,753,954	298,346	55,142,015	7,187,400	2,722,170	15,595	32,388,428
2014	118,524,900	298,346	65,975,432	7,187,400	2,722,170	16,384	42,325,168

Source : Directorate General of Mineral and Coal
Note : 2000-2009 Exclude Mining Concession (Kuasa Pertambangan)
*) Revised Data for 2012 and 2013
**) Revised Data for 2013

6.2.1. Oil Reserves

per January

(Billion Barel)

Year	Proven	Potential	Total
2000	5.12	4.49	9.61
2001	5.10	4.65	9.75
2002	4.72	5.03	9.75
2003	4.73	4.40	9.13
2004	4.30	4.31	8.61
2005	4.19	4.44	8.63
2006	4.37	4.56	8.93
2007	3.99	4.41	8.40
2008	3.75	4.47	8.22
2009	4.30	3.70	8.00
2010	4.23	3.53	7.76
2011	4.04	3.69	7.73
2012	3.74	3.67	7.41
2013	3.69	3.86	7.55
2014	3.62	3.75	7.37

Source : Directorate General of Oil and Gas

6.2.2. Refinery Capacity in 2014

(MBSD)

Refinery	Refinery Capacity
Tri Wahana Universal (TWU)	6.00
Dumai	127.00
Sungai Pakning	50.00
Musi	127.30
Cilacap	348.00
Balikpapan	260.00
Balongan	125.00
Cepu	3.80
Kasim	10.00
Tuban (TPPI)	100.00
Total	**1,157.10**

Source: Directorate General of Oil and Gas

6.2.3. Crude Oil Supply and Demand

Year	Production	Export	Import	Oil Refinery Input	
	Thousand bbl	Thousand bbl	Thousand bbl	Thousand bbl	Thousand bpd
2000	517,489	223,500	78,615	360,232	986.9
2001	489,306	241,612	117,168	361,396	990.1
2002	456,026	218,115	124,148	357,971	980.7
2003	419,255	189,095	137,127	358,519	982.2
2004	400,554	178,869	148,490	366,033	1,002.8
2005	386,483	159,703	164,007	357,656	979.9
2006	367,049	134,960	116,232	333,136	912.7
2007	348,348	135,267	115,812	330,027	904.2
2008	357,501	134,872	95,100	331,949	909.5
2009	346,313	132,223	120,119	328,589	900.2
2010	344,888	134,473	101,093	340,475	853.4
2011	329,265	135,572	96,862	365,820	879.5
2012	314,666	115,339	95,968	347,853	819.9
2013	300,830	117,380	118,334	352,438	822.3
2014	287,902	109,933	121,993	369,792	847.8

Source : Directorate General of Oil and Gas
Note : Oil Refinery Input Consist of Crude Oil, Condensate and Others

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.2.4. Domestic Oil Fuels Sales

(Kilo Liter)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*)	2013**)	2014
Avgas	3,550	3,430	3,488	3,556	3,416	3,070	3,390	2,163	2,003	1,687	2,231	2,316	2,606	2,868	1,499
Avtur	1,202,717	1,473,503	1,597,291	1,929,351	2,437,923	2,322,634	2,428,078	2,520,040	2,635,670	2,760,678	3,527,382	3,562,126	3,898,832	4,159,010	4,229,094
RON 88	11,877,659	12,538,350	13,263,285	14,150,246	15,808,588	17,132,126	16,431,321	17,483,011	19,699,070	21,441,130	23,078,874	25,527,429	28,459,985	29,501,773	29,707,002
Kerosene	12,457,776	12,283,033	11,678,439	11,753,109	11,846,119	11,370,026	10,023,211	9,898,488	7,901,596	4,779,818	2,845,486	1,984,939	1,382,469	1,260,490	971,434
ADO	22,072,256	23,359,617	24,212,847	24,064,458	26,487,751	27,056,409	25,164,947	24,780,885	26,999,434	26,691,227	27,653,973	26,391,275	24,940,275	23,113,427	19,005,247
IDO	1,472,168	1,426,877	1,360,379	1,183,478	1,093,414	891,785	497,819	269,466	180,997	145,192	167,733	133,589	91,600	79,137	60,870
Fuel Oil	6,076,212	6,162,485	6,260,273	6,215,566	5,754,507	4,802,535	4,820,184	5,136,408	4,969,526	4,480,563	4,316,705	3,904,580	3,428,875	1,973,903	1,884,040
Premix (94)	389,334	396,631	364,006	14,972	0	0	0	0	0	0	0	0	0	0	0
Super TT	55,418	86,217	102,882	3,592	0	0	0	0	0	0	0	0	0	0	0
BB2L	106,880	74,788	2,215	0	0	0	0	0	0	0	0	0	0	0	0
RON 95	0	0	0	107,441	121,866	99,326	128,289	158,070	114,789	104,388	113,812	249,639	149,424	158,714	154,888
RON 92	0	0	0	371,238	487,562	248,875	505,730	472,284	297,982	460,148	670,364	625,162	666,461	850,408	1,062,920
Solar 51	0	0	0	0	0	0	1,344	1,288	0	1,955	4,434	6,392	12,297	23,053	33,305
Bio Premium	0	0	0	0	0	0	1,624	55,970	44,016	105,816	0	0	0	0	0
Bio Pertamax	0	0	0	0	0	0	16	9,956	16,234	20,232	0	0	0	0	0
Bio Solar	0	0	0	0	0	0	217,048	877,457	931,179	2,398,234	4,393,861	7,180,806	9,269,482	10,934,294	13,667,983
Total Fuel	**55,713,970**	**57,804,931**	**58,845,105**	**59,797,007**	**64,041,146**	**63,926,786**	**60,221,657**	**61,664,198**	**63,792,494**	**63,391,066**	**66,774,855**	**69,613,254**	**72,302,305**	**72,057,077**	**70,778,283**

Sources : Directorate General of Oil and Gas
Note : *) Revised Data for ADO and RON 95
**) Revised Data for ADO, IDO, RON 92 and RON 95

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.2.5. Crude Oil Refinery Production

(Thousand Barrel)

Year	RON 88	Avtur + JP5	Avgas	Kerosene	ADO		IDO	Fuel Oil	RON 95	RON 92	RON 51	Total Fuel
2000	73,852	8,442	0.00	57,899	95,907		8,141	32,483	0.00	0.00	0.00	276,723
2001	76,601	8,620	51.82	57,992	95,929		9,109	35,087	0.00	0.00	0.00	283,389
2002	73,287	9,319	32.81	56,301	93,985		8,431	37,302	0.00	0.00	0.00	278,658
2003	72,695	10,701	32.08	58,553	94,560		7,792	33,874	0.00	0.00	0.00	278,208
2004	71,937	11,215	32.25	56,820	98,645		10,202	30,962	303	3,037	0.00	283,153
2005	71,013	10,686	33.81	53,721	94,633		8,559	27,752	432	1,700	0.00	268,529
2006	70,200	10,653	21.00	55,679	90,813		3,473	24,157	663	2,162	0.00	257,821
2007	71,337	8,190	29.58	51,934	82,120		2,267	24,795	951	2,754	18.11	244,396
2008	72,404	11,229	23.95	48,031	92,812		2,036	23,084	387	1,523	2.67	251,533
2009	74,751	16,672	0.21	29,476	110,698		1,213	18,843	774	2,832	30.65	255,289
2010	66,820	15,710	6.67	18,985	107,351		1,377	21,515	668	3,301	15.13	235,748
2011	64,460	17,061	6.56	14,378	116,391		1,352	20,276	736	2,446	28.16	237,135
2012*)	67,684	19,050	0.00	10,808	123,483		1,135	15,047	514	2,487	122.34	240,330
2013*)	68,174	18,623	0.00	9,827	123,726		927	13,879	566	2,651	516.91	238,892
2014	70,829	19,938	0.00	7,332	129,502		1,107	12,243	545	3,629	381.64	245,507

Source : Directorate General of Oil and Gas
Note : 2000-2003 RON 88 Included Premix (94), Super TT and BB 2L (Unleaded Gasoline)
*) Revised Data for RON 88, Kerosene, ADO and LSWR

2015 Handbook of Energy & Economic Statistics of Indonesia 6

(Thousand Barrel)

Year	Secondary Fuel				Non Fuel		Lubricant	LPG	HOMC	Total Production
	Naphtha	LOMC	LSWR	Total						
2000	16,647	1,666	38,618	56,931	8,172		2,676	8,378	0.00	352,880
2001	20,180	143	34,211	54,534	7,922		2,712	8,160	0.00	356,717
2002	16,230	0.00	28,363	44,593	7,796		2,252	8,199	0.00	341,498
2003	18,306	0.00	32,050	50,357	11,405		2,867	8,702	0.00	351,539
2004	18,737	0.00	29,189	47,926	9,284		2,823	9,380	0.00	352,566
2005	21,216	0.00	28,965	50,181	9,634		2,404	8,457	0.00	339,205
2006	25,405	0.00	31,070	56,475	11,460		2,734	8,971	0.00	337,461
2007	25,155	0.00	29,472	54,627	12,202		2,814	8,905	10,597	333,540
2008	28,270	0.00	30,033	58,303	14,130		3,067	8,054	10,871	345,959
2009	23,820	63	31,691	55,510	15,642		2,772	8,119	7,498	344,831
2010	22,321	187	29,522	52,030	19,189		2,027	7,602	4,982	321,578
2011	28,613	0.00	24,021	52,634	27,499		3,065	9,143	11,908	341,384
2012*)	23,293	59	26,451	49,803	41,448		2,988	7,288	10,405	352,263
2013*)	23,793	0.00	24,487	48,281	21,726		2,697	6,635	6,564	324,795
2014	21,985	243	26,946	49,174	30,460		2,529	6,362	8,544	342,577

Source : Directorate General of Oil and Gas
Note : 2000-2003 RON 88 Included Premix (94), Super TT and BB 2L (Unleaded Gasoline)
*) Revised Data for RON 88, Kerosene, ADO and LSWR

6.2.6. Import of Refined Products

(Thousand KL)

Year	Avtur	Avgas	RON 88	RON 95	RON 92		DPK	HOMC	ADO	Fuel Oil	IDO	Total Fuel
2000	0	0	0	0	0		2,966	1,984	7,194	2,326	0.0	14,470
2001	0	0	0	0	0		2,718	2,410	7,879	1,166	0.0	14,174
2002	0	0	0	0	0		2,916	3,154	9,637	1,232	0.0	16,940
2003	0	0	0	0	0		2,516	3,076	9,955	1,512	0.0	17,058
2004	679	0	772	0	0		2,907	5,804	12,339	1,896	0.0	24,398
2005	654	0	6,202	0	3		2,604	1,076	14,470	1,493	0.0	26,502
2006	796	0	5,841	0	69		861	1,088	10,846	1,682	0.0	21,184
2007	1,176	0	7,069	27	35		1,080	108	12,367	2,163	8	24,032
2008	769	0	8,572	17	40		333	57	12,284	2,573	28	24,673
2009	172	1	10,263	32	120		0	1,301	8,505	1,909	8	22,311
2010	577	0	12,283	48	381		0	1,535	10,637	549	7	26,017
2011	816	2	15,248	36	319		0	157	13,573	998	0.0	31,149
2012	710	2	17,621	36	213		0	525	12,455	420	0.0	31,982
2013	950	2	18,340	60	268		0	1,015	11,947	107	6	32,695
2014	981	0	18,829	64	619		0	1,093	11,475	174	6.7	33,242

Source : Directorate General of Oil and Gas

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.2.7. Export of Refined Products

(Thousand Barrel)

Year	RON 88	Avtur	Kerosene	ADO	Fuel Oil	RON 92		RON 95	Total Fuel	Naphtha	Lubricant	Other Product	Total
2000	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	11,390.1	0.0	55,694.4	67,085
2001	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	13,448.4	147.5	41,522.3	55,118
2002	0.0	0.0	0.0	0.0	3,253.2	0.0		0.0	3,253.2	10,993.3	417.3	40,825.9	55,490
2003	0.0	0.0	0.0	0.0	2,813.2	0.0		0.0	2,813.2	18,715.0	674.0	41,509.8	63,712
2004	0.0	0.0	0.0	0.0	4,940.0	0.0		0.0	4,940.0	11,763.0	513.0	47,285.0	64,501
2005	51.2	0.0	0.5	114.9	3,233.5	0.0		0.0	3,400.1	6,531.1	64.2	33,357.8	43,353
2006	37.0	0.0	0.8	78.4	203.6	0.0		0.0	319.8	946.6	87.3	36,159.2	37,513
2007	47.4	0.0	0.7	988.1	851.3	0.0		0.0	1,887.6	6,163.3	8.0	35,657.9	43,717
2008	38.4	3.4	0.0	1,860.7	64.1	0.0		0.0	1,966.6	5,371.7	0.0	30,308.3	37,647
2009	130.3	423.7	427.0	759.5	303.5	0.0		0.0	2,044.0	3,182.5	0.0	31,848.9	37,075
2010	23.9	2.6	1,436.0	1,518.7	600.2	0.0		0.3	3,581.8	3,955.0	0.0	29,257.4	36,794
2011	79.6	9.2	2,700.9	112.7	0.0	0.0		6.8	2,909.2	1,316.4	65.4	26,108.0	30,399
2012*)	68.6	13.3	1,917.4	92.3	0.0	60.2		0.0	2,151.7	0.0	301.5	25,862.3	28,315
2013**)	0.0	8.6	1,631.8	0.0	4,319.5	84.0		13.4	6,057.3	1,092.0	0.0	19,693.3	26,843
2014	0.0	12.9	400.7	147.9	3,215.2	159.0		0.0	3,935.6	5,338.7	0.0	23,342.0	32,616

Source : Directorate General of Oil and Gas
Note : *) Revised Data for Lubricant and Other Product
**) Revised Data for Other Product

6.2.8. Indonesia Crude Oil Export by Destination

(Thousand Barrel)

Year	Japan	USA	Korea	Taiwan	Singa-pore	Others	Total
2000	74,807	14,153	37,408	9,157	15,656	72,320	223,500
2001	77,866	15,349	51,965	8,167	20,517	67,748	241,612
2002	61,752	15,864	43,977	7,023	14,648	74,852	218,115
2003	61,285	12,051	40,822	5,528	11,410	57,999	189,095
2004	52,040	11,930	42,111	6,029	8,761	57,998	178,869
2005	43,628	6,256	40,108	2,639	7,612	59,459	159,703
2006	42,203	8,950	23,723	7,249	5,480	47,355	134,960
2007	45,892	4,464	18,051	3,779	7,796	55,286	135,267
2008	37,724	4,740	12,289	1,981	15,083	63,053	134,872
2009	25,783	5,264	19,394	2,160	11,649	67,974	132,223
2010	23,407	4,779	17,607	1,961	10,576	76,143	134,473
2011	29,511	31,784	3,484	0	24,543	46,250	135,572
2012	30,446	28,579	3,652	0	15,457	37,205	115,339
2013	33,229	26,467	2,868	0	15,388	39,428	117,380
2014	32,625	6,811	7,586	653	13,680	48,578	109,933

Source : Directorate General of Oil and Gas

6.2.9. LPG Supply

(Ton)

Year	Production			Export	Import	Total Supply	Sales
	Gas Refinery	Oil Refinery	Total				
2000	1,321,037	766,632	2,087,669	1,253,197	0	834,472	969,132
2001	1,415,534	772,143	2,187,677	1,423,928	0	763,749	971,360
2002	1,296,505	814,177	2,110,682	1,217,410	0	893,272	1,025,790
2003	1,148,379	778,939	1,927,318	1,033,672	111,178	1,004,824	1,028,360
2004	1,130,540	896,395	2,026,935	981,780	32,994	1,078,150	1,076,780
2005	995,097	832,717	1,827,814	1,015,366	22,166	834,614	996,000
2006	573,193	855,397	1,428,590	291,456	68,997	1,206,131	1,104,306
2007	546,734	862,696	1,409,430	268,000	137,800	1,279,230	1,281,000
2008	910,663	780,103	1,690,766	100,531	415,000	2,005,235	1,843,817
2009	1,430,671	694,547	2,125,218	88,463	917,171	2,953,926	2,922,080
2010	1,828,743	649,628	2,478,371	0	1,621,959	4,100,330	3,761,086
2011	1,580,598	704,842	2,285,439	0	1,991,774	4,277,213	4,347,465
2012	1,824,297	377,242	2,201,539	0	2,573,670	4,775,209	5,030,547
2013	1,447,055	563,935	2,010,990	0	3,299,808	5,310,799	5,607,430
2014	1,833,417	547,445	2,380,862	0	3,604,009	5,984,871	6,093,138

Source : Directorate General of Oil and Gas
Note : Revision/ misprint

6.3.1. Natural Gas Reserves

per January

(TSCF)

Year	Proven	Potential	Total
2000	94.75	75.56	170.31
2001	92.10	76.05	168.15
2002	90.30	86.29	176.59
2003	91.17	86.96	178.13
2004	97.81	90.53	188.34
2005	97.26	88.54	185.80
2006	94.00	93.10	187.10
2007	106.00	59.00	165.00
2008	112.50	57.60	170.10
2009	107.34	52.29	159.63
2010	108.40	48.74	157.14
2011	104.71	48.18	152.89
2012	103.35	47.35	150.70
2013	101.54	48.85	150.39
2014	100.26	49.04	149.30

Source : Directorate General of Oil and Gas

6.3.2. Natural Gas Production

(MMSCF)

Year	Assosiated	Non Assosiated	Total
2000	705,979	2,195,323	2,901,302
2001	716,930	2,089,154	2,806,084
2002	720,125	2,316,230	3,036,355
2003	789,202	2,366,041	3,155,243
2004	772,812	2,231,133	3,003,945
2005	795,224	2,190,117	2,985,341
2006	708,715	2,245,281	2,953,997
2007	433,630	2,371,910	2,805,540
2008	472,897	2,412,431	2,885,328
2009	467,570	2,593,326	3,060,897
2010	471,507	2,936,086	3,407,592
2011	472,552	2,783,827	3,256,379
2012	405,465	2,769,175	3,174,639
2013*)	352,561	2,768,277	3,120,838
2014	304,693	2,871,098	3,175,791

Source : Directorate General of Oil and Gas
Note : *) Revised Data for Assosiated Gas Production

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.3.3. Natural Gas and LNG Supply and Demand

Year	Natural Gas Production	Gas Lift & Reinjec-tion	Own Use	Flare	Utilization		Utilization					Export LNG
					LNG Plant	LPG Plant	Refinery	City Gas*)	Industry	Electricity	Export Gas Pipa	
	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(MMSCF)	(ton)
2000	2,901,302	237,280	157,238	172,883	1,584,365	31,832	32,277	1,194	483,438	223,564	0	27,321,020
2001	2,806,084	219,191	152,677	186,380	1,489,935	12,807	29,437	1,307	455,798	254,238	31,967	24,343,678
2002	3,036,355	202,875	170,089	176,585	1,656,472	26,901	30,879	1,447	448,261	196,300	82,619	26,184,740
2003	3,155,243	228,019	168,120	148,709	1,719,127	24,429	22,776	1,435	500,622	187,187	126,450	26,077,500
2004	3,003,945	206,659	151,041	134,997	1,607,970	28,661	20,795	1,662	473,695	169,457	163,045	25,237,867
2005	2,985,341	199,890	139,245	107,236	1,511,335	24,578	16,155	1,751	480,382	175,222	251,303	23,676,765
2006	2,953,997	185,307	142,384	112,537	1,436,093	32,879	15,159	1,856	461,277	169,269	257,224	22,400,121
2007	2,805,540	147,303	136,952	97,912	1,300,348	35,096	24,972	2,263	443,889	183,329	319,397	20,851,609
2008	2,885,328	154,890	143,252	113,701	1,270,854	13,196	29,727	2,718	623,616	221,236	234,964	20,579,632
2009	3,060,897	154,800	175,024	172,922	1,221,502	17,806	35,566	4,790	654,428	231,521	294,109	19,932,902
2010	3,407,592	174,844	205,378	184,893	1,427,917	20,866	34,038	6,115	635,361	269,003	333,993	24,184,380
2011	3,256,379	185,997	198,463	179,460	1,293,151	14,289	37,476	7,896	666,195	248,871	335,510	21,971,547
2012	3,174,639	191,886	189,384	230,353	1,019,569	28,141	39,782	9,896	685,751	289,424	358,325	18,212,204
2013**)	3,120,838	156,154	217,416	237,295	1,040,992	26,647	38,866	8,669	689,312	302,958	335,164	19,250,004
2014	3,175,791	176,267	219,652	311,614	978,978	29,757	41,992	8,974	683,177	319,491	342,669	18,186,393

Source : Directorate General of Oil and Gas
Note : *) City Gas Sales not Including Industry, Only Household and Commercial Sector
**) Revised Data for Natural Gas Production and City Gas

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.3.4. City Gas Sales and Utilization

Year	Sales (Million M³)				Number of Customer		Number of Customer			Specific Consumption (Thousand M³)		
	Household	Industry & Commercial	Transporta-tion	Total	Household		Industry	Commercial	Total	Household	Industry & Commercial	Average Uses
2000	12.74	1,907.88	27.44	1,948	42,991		594	1,053	44,638	0.2964	1,158	43.03
2001	13.79	2,117.35	21.91	2,153	48,401		626	1,160	50,187	0.2849	1,186	42.46
2002	15.13	2,418.03	19.72	2,453	51,943		646	1,330	53,919	0.2912	1,224	45.13
2003	15.94	2,668.29	17.14	2,701	64,889		675	1,305	66,869	0.2456	1,348	40.14
2004	19.37	2,917.09	13.26	2,950	75,244		677	1,158	77,079	0.2574	1,590	38.10
2005	19.32	3,108.91	6.68	3,135	77,833		723	1,412	79,968	0.2482	1,456	39.12
2006	19.82	3,277.98	6.55	3,304	79,736		769	1,463	81,968	0.2485	1,469	40.23
2007	20.39	4,267.06	7.36	4,295	81,294		873	1,468	83,635	0.2508	1,823	51.26
2008	19.61	5,693.28	12.49	5,725	82,123		1,099	1,498	84,720	0.2387	2,192	67.43
2009	19.43	8,034.44	11.08	8,065	83,519		1,180	1,593	86,292	0.2326	2,897	93.33
2010	20.39	8,430.72	29.47	8,481	85,326		1,216	1,592	88,134	0.2389	3,002	95.89
2011	18.01	4,997.35	27.24	5,043	86,167		1,246	1,641	89,054	0.2090	1,731	56.32
2012	21.19	5,212.12	23.19	5,256	87,437		1,253	1,674	90,364	0.2424	1,781	57.91
2013	19.30	5,158.65	27.93	5,206	88,613		1,260	1,717	91,590	0.2178	1,733	56.53
2014	18.03	5,302.25	31.20	5,351	92,858		1,439	1,752	96,049	0.1941	1,662	55.39

2015 Handbook of Energy & Economic Statistics of Indonesia 6

6.4.1. Power Plant Installed Capacity

(MW)

Year	Hydro PP	Steam PP	Gas PP	Combined Cycle PP	Geother-mal PP	Diesel PP	Gas Engine PP		Wind PP	Mycro Hydro PP	Mini Hydro PP	Solar PP	Coal Gasifica-tion PP	Waste PP	Total
2000*)	4,199.28	10,671.56	3,804.80	6,863.22	525.00	11,223.33	0.00		0.00	0.00	0.00	0.00	0.00	0.00	37,287
2001	3,112.61	7,798.73	1,966.77	6,998.22	785.00	3,016.05	0.00		0.00	0.00	0.00	0.00	0.00	0.00	23,677
2002	3,155.17	6,900.00	1,224.72	6,863.22	785.00	2,589.12	0.00		0.00	0.00	0.00	0.00	0.00	0.00	21,517
2003	3,167.92	9,750.00	1,687.72	6,998.22	805.00	2,730.60	0.00		0.00	0.00	0.00	0.00	0.00	0.00	25,139
2004	3,199.71	9,750.00	2,802.57	6,846.27	820.00	2,993.60	12.00		0.00	0.00	0.00	0.00	0.00	0.00	26,424
2005	3,407.46	9,750.00	3,099.35	6,919.97	850.00	3,208.08	3.00		0.00	0.45	3.03	0.00	0.00	0.00	27,241
2006	3,715.61	11,170.00	3,102.95	7,659.97	850.00	3,165.05	21.00		0.00	0.55	3.03	0.00	0.00	0.00	29,688
2007	3,688.04	12,014.00	3,220.18	7,699.97	980.00	3,211.91	33.00		0.10	0.55	6.03	0.00	0.00	0.00	30,854
2008	3,690.80	12,294.00	3,068.97	8,009.97	1,052.00	3,272.98	66.84		0.26	0.69	6.03	0.00	0.00	0.00	31,463
2009	3,694.95	12,594.00	3,135.88	8,009.97	1,189.00	3,256.36	71.00		1.06	0.69	6.03	0.00	0.00	0.00	31,959
2010	3,719.69	12,981.50	3,821.57	7,590.32	1,192.75	4,569.89	92.84		0.34	0.69	13.53	0.19	0.00	0.00	33,983
2011	3,880.83	16,318.00	4,236.02	8,480.97	1,209.00	5,471.93	169.54		0.93	5.93	57.66	1.16	41.00	26.00	39,899
2012	4,078.24	19,714.00	4,343.82	9,461.11	1,343.80	5,973.58	198.74		0.93	6.71	61.46	4.09	41.00	26.00	45,253
2013	5,058.87	23,812.53	4,389.08	9,852.21	1,345.40	5,935.00	448.12		0.63	29.69	77.05	9.02	6.00	26.00	50,990
2014	5,059.06	25,104.23	4,310.50	10,146.11	1,405.40	6,206.99	610.74		1.12	30.46	139.87	9.02	6.00	36.00	53,065

Source : PT PLN Statistics and Electricity Statistics, Directorat General of Electricity
Note : *) Diesel PP Including Captive Power

6.4.2. Power Plant Production

(GWh)

Year	PLN													
	Hydro PP	Geother-mal PP	Steam PP			Total	Gas PP		Combined Gas-Steam PP	Diesel PP	Solar PP	Wind PP	Gas Engine PP	Sub-Total
			Coal	Oil	Gas									
2000	9,110	2,649	28,776	6,055	3,598	38,429	1,252		26,397	6,355	0	0	0	84,190
2001	10,651	2,982	29,330	6,557	3,489	39,376	1,459		27,366	6,520	0	0	0	88,355
2002	8,834	3,187	29,313	8,884	835	39,032	2,229		28,803	7,209	0	0	0	89,293
2003	8,472	2,959	31,737	9,108	1,334	42,178	2,486		28,409	7,977	0	0	0	92,481
2004	8,943	3,147	30,806	9,636	1,204	41,646	3,179		30,700	8,577	0	0	0	96,192
2005	9,831	3,006	33,253	8,180	835	42,268	6,039		31,272	8,866	0	0	0	101,282
2006	8,759	3,141	38,362	8,575	828	47,764	5,031		30,918	8,855	0	0	0	104,469
2007	10,627	3,188	41,880	9,179	1,151	52,209	5,148		31,374	8,694	0	0.02	121	111,241
2008	10,740	3,391	41,311	10,186	856	52,353	5,621		35,731	10,212	0.10	0	0	118,047
2009	10,307	3,504	43,138	9,031	795	52,964	8,674		34,747	10,432	0.1	0	0	120,628
2010	15,827	3,398	46,685	6,712	1,009	54,407	9,266		36,812	11,926	0.50	0.03	74	131,710
2011	10,316	3,487	54,950	6,383	1,003	62,335	10,018		40,410	16,125	0.72	0	48	142,739
2012	10,525	3,558	66,633	2,391	4,799	73,823	8,310		34,569	18,913	2.85	0	55	149,755
2013	13,014	4,345	74,398	1,257	6,195	81,850	6,195		36,493	18,919	5.48	0	382	163,966
2014	11,164	4,285	84,076	747	5,189	90,012	5,189		38,800	21,862	6.81	0	1,087	175,298

2015 Handbook of Energy & Economic Statistics of Indonesia | 6

6.4.2. Power Plant Production (continued)

(GWh)

Year	PLN Purchase from IPP & PPU							PLN Purchase from IPP & PPU						
	Hydro PP	Geother-mal PP	Steam PP			Total	Gas PP	Combined Gas-Steam PP	Diesel PP	Solar PP	Wind PP	Waste PP	Sub-Total	Grand Total
			Coal	Gas	Biomass									
2000	906	0	5,226	0.0	6	5,232	0	682	94	0.00	0.00	0.00	6,914.7	91,105
2001	1,004	0	8,383	0.0	8	8,391	0	773	88	0.00	0.00	0.00	10,255.5	98,610
2002	1,099	0	13,616	0.0	11	13,627	0	925	221	0.00	0.00	0.00	15,872.6	105,166
2003	627	0	14,722	0.0	15	14,737	0	1,511	283	0.00	0.00	0.00	17,158.0	109,639
2004	731	0	17,405	0.0	20	17,425	0	1,947	347	0.00	0.00	0.00	20,449.4	116,642
2005	894	3,598	18,572	2.8	22	18,596	373	2,566	251	0.00	0.00	0.00	26,278.2	127,560
2006	864	3,517	20,305	2.2	32	20,339	787	2,816	318	0.00	0.00	0.00	28,639.7	133,108
2007	659	3,833	22,022	1.7	36	22,060	1,514	2,746	388	0.00	0.00	0.00	31,200.1	142,442
2008	788	4,918	20,182	89.7	55	20,327	1,336	3,591	428	0.00	0.27	0.00	31,389.7	149,437
2009	1,077	5,791	22,776	2.3	63	22,841	1,669	4,395	393	0.00	3.67	0.00	36,168.9	156,797
2010	1,629	5,959	21,792	98.9	95	21,985	1,618	6,512	369	0.02	3.61	0.00	38,076.2	169,786
2011	2,103	5,884	26,140	153.8	186	26,480	1,666	4,179	331	0.05	4.69	30.86	40,679.3	183,419
2012*)	2,274	5,859	35,533	133.6	238	31,745	1,691	4,519	279	0.16	4.61	30.86	50,563	200,318
2013*)	3,916	5,069	36,057	140.8	228	36,424	1,807	4,945	18	0.11	1.40	39.36	52,222.8	216,188
2014	3,984	5,753	36,256	0.00	206	36,395	1,857	5,118	48	3.98	0.00	32.07	53,258	228,555

Source : PLN Statistics and Electricity Statistics, Directorate General of Electricity
Note : *) Revised Data

6.4.3. Import of Electricity

(GWh)

Year	Country of Origin	Micro Hydro PP*)
2009	Malaysia	1.26
2010	Malaysia	2.22
2011	Malaysia	2.54
2012	Malaysia	2.44
2013	Malaysia	2.99
2014	Malaysia	8.99

Source : PLN Statistics
Note : Indonesia has been Importing the Electricity Since 2009
*) Revised Data

6.4.4. Electricity Sales

(GWh)

Year	Electricity Sales / Tariff Segment							
	House-hold	Com-mercial	Industry	Street Lighting	Social	Govern-ment	Transpor-tation	Total
2000	30,563	10,532	34,013	1,071	1,644	1,298	44	79,165
2001	33,340	11,346	35,593	1,129	1,782	1,282	49	84,520
2002	33,994	11,792	36,831	1,294	1,843	1,281	53	87,089
2003	35,753	13,171	36,497	1,512	2,022	1,433	53	90,441
2004	38,588	15,203	40,324	2,045	2,238	1,645	55	100,097
2005	41,184	16,968	42,448	2,221	2,430	1,726	55	107,032
2006	43,753	18,348	43,615	2,414	2,604	1,808	67	112,610
2007	47,325	20,524	45,803	2,586	2,909	2,016	85	121,247
2008	50,184	22,845	47,969	2,761	3,082	2,096	81	129,019
2009	54,945	24,715	46,204	2,888	3,384	2,335	111	134,582
2010	59,825	27,069	50,985	3,000	3,700	2,630	89	147,297
2011	65,112	28,219	54,725	3,068	3,994	2,787	88	157,993
2012	72,133	30,880	60,176	3,141	4,496	3,057	108	173,991
2013	77,211	34,369	64,381	3,251	4,939	3,261	129	187,541
2014	84,086	36,128	65,909	3,394	5,446	3,484	155	198,602

Source : PLN Statistic

6.4.5. Fuel Consumption of PLN Power Plant

Year	Coal	HSD	IDO	FO	Natural Gas
	(ton)	(KL)	(KL)	(KL)	(MMSCF)
2000	13,135,584	3,141,917	23,146	1,858,568	228,838
2001	14,027,713	3,575,348	30,457	1,793,283	222,421
2002	14,054,377	4,625,521	40,682	2,300,603	192,927
2003	15,260,305	5,024,362	31,573	2,557,546	184,304
2004	15,412,738	6,299,706	36,935	2,502,598	176,436
2005	16,900,972	7,626,201	27,581	2,258,776	143,050
2006	19,084,438	7,586,916	23,977	2,387,622	157,894
2007	21,466,348	7,874,290	13,558	2,801,128	171,209
2008	20,999,521	8,127,546	28,989	3,163,954	181,661
2009	21,604,464	6,365,116	11,132	3,032,657	266,539
2010	23,958,699	6,887,455	6,895	2,430,584	283,274
2011	27,434,163	8,943,880	13,923	2,509,047	285,722
2012	35,514,791	6,625,335	4,065	1,585,395	365,927
2013	39,601,034	6,291,667	3,221	1,179,604	409,890
2014	44,604,981	6,330,517	3,849	1,096,638	450,190

Source : PLN Statistic

6.4.6. Share of Fuel Consumption of PLN Power Plant

(%)

Year	Type of Fuel				
	Coal	HSD	IDO	FO	Natural Gas
2000	44.09	13.62	0.12	10.10	32.08
2001	45.42	14.95	0.15	9.40	30.08
2002	44.10	18.74	0.20	11.69	25.28
2003	45.37	19.29	0.14	12.31	22.89
2004	44.00	23.23	0.16	11.57	21.04
2005	46.40	27.04	0.12	10.04	16.40
2006	48.46	24.88	0.09	9.82	16.75
2007	49.53	23.46	0.05	10.46	16.50
2008	47.46	23.72	0.10	11.58	17.15
2009	47.09	17.91	0.04	10.70	24.26
2010	49.27	18.29	0.02	8.09	24.33
2011	49.88	21.00	0.04	7.39	21.70
2012	57.35	13.82	0.01	4.14	24.68
2013	59.32	12.17	0.01	2.86	25.64
2014	60.80	11.14	0.01	2.42	25.63

Source : PLN Statistic

6.4.7. PLN Electricity System Performance

Year	Average Thermal Efficiency	Capacity Factor	Load Factor	Peak Load	Transmission & Distribussion Losses
	(%)	(%)	(%)	(MW)	(%)
2000	34.66	46.29	69.54	15,320	11.65
2001	34.49	47.90	71.13	16,314	13.52
2002	34.56	48.28	72.10	17,160	16.45
2003	34.35	49.78	71.88	17,949	16.88
2004	34.23	51.14	72.64	18,896	11.29
2005	34.62	52.15	75.48	19,263	11.54
2006	33.51	48.00	64.15	20,354	11.45
2007	32.04	64.47	59.60	21,306	11.08
2008	31.96	52.62	80.77	21,120	10.46
2009	29.95	53.71	76.37	23,438	9.93
2010	29.46	55.90	77.78	24,917	9.70
2011	29.23	55.67	78.53	26,665	9.41
2012	26.87	51.96	79.18	28,882	9.21
2013	27.18	54.72	80.04	30,834	9.91
2014	26.60	50.97	78.30	33,321	9.97

Source : PLN Statistic

6.5.1. Geothermal Resources and Reserves Status Year 2014

(MW)

No	Location	Resources		Reserves			Total
		Specu-lative	Hipo-tethic	Prob-able	Pos-sible	Proven	
1	Sumatera	3,182	2,519	6,790	15	380	12,886
2	Jawa	1,560	1,739	4,023	658	1,815	9,795
3	Bali-Nusa Tenggara	412	431	1,049	0	15	1,907
4	Sulawesi	1,239	343	1,419	150	78	3,229
5	Maluku	532	89	800	0	0	1,421
6	Kalimantan	163	0	0	0	0	163
7	Papua	75	0	0	0	0	75
Total		**7,163**	**5,121**	**14,081**	**823**	**2,288**	**29,476**

Source : Geological Agency
Note : Data Status March 2015

6.5.2. Geothermal Power Plant Capacity Status Year 2014

(MW)

No	Working Area	Location	Turbine Capacity		Operator	Total Capacity
1	PLTP Kamojang (Pertamina)	West Java	1 x 30 MWe		PLN	200
			2 x 55 MWe			
			1 x 60 MWe		Pertamina	
2	PLTP Lahendong (Pertamina)	North Sulawesi	4 x 20 MWe		PLN	80
3	PLTP Sibayak (Pertamina)	North Sumatera	1 x 12 MWe		Pertamina	12
4	PLTP Salak (Chevron Gas)	West Java	3 x 60 MWe		PLN	377
			3 x 65.6 MWe		CGS	
5	PLTP Darajat (Chevron GI)	West Java	1 x 55 MWe		PLN	270
			1 x 94 MWe		CGI	
			1 x 121 MWe		CGI	
6	PLTP Wayang Windu (Star Energi)	West Java	1 x 110 MWe		SE	227
			1 x 117 MWe			
7	PLTP Dieng (Geo Dipa Energi)	Central Java	1 x 60 MWe		GDE	60
8	PLTP Ulubelu (Pertamina)	Lampung	2 x 55 MWe		PGE	110
9	PLTP Ulumbu (PLN)	NTT	4 x 2.5 Mwe		PLN	10
10	PLTP Mataloko (PLN)	NTT	1 x 2.5 Mwe		PLN	2.5
11	PLTP Patuha (Geo Dipa Energi)	West Java	1 x 5.5 Mwe		GDE	55
					Total	**1,403.5**

Source : Directorate General of New and Renewable Energy and Energy Conservation

6.5.3. Geothermal Steam Production

(Thousand Tonnes Geothermal Steam)

Year	Pertamina Field					KOB Field	KOB Field							
	Kamojang	Sibayak	Lahendong	Ulubelu	Sub Total	Salak	Darajat	Wayang Windu	Dieng	Ulumbu	Mataloko	Patuha*)	Sub Total	Total
2000	8,238	66	0	0	8,304	19,494	4,876	3,717	0	0	0	0	28,087	36,391
2001	8,623	242	457	0	9,322	22,044	7,242	6,669	0	0	0	0	35,955	45,277
2002	9,292	212	954	0	10,458	21,742	7,453	6,929	0	0	0	0	36,124	46,582
2003	9,274	42	1,132	0	10,448	21,325	7,435	6,431	1,521	0	0	0	36,712	47,160
2004	9,277	126	1,173	0	10,576	22,595	8,011	6,863	2,305	0	0	0	39,774	50,350
2005	7,462	74	1,012	0	8,548	24,167	7,551	6,809	2,518	0	0	0	41,045	49,593
2006	8,096	165	1,240	0	9,501	24,527	7,633	6,625	2,544	0	0	0	41,330	50,831
2007	8,121	84	1,311	0	9,517	24,346	10,322	6,524	1,209	0	0	0	42,400	51,917
2008	12,100	289	2,349	0	14,738	24,482	13,487	6,665	1,644	0	0	0	46,279	61,016
2009	12,612	498	2,665	0	15,775	24,538	13,977	12,989	780	0	0	0	52,285	68,060
2010	12,446	548	2,964	0	15,959	24,272	14,264	13,675	1,221	0	0	0	53,433	69,391
2011	12,470	310	2,510	0	15,290	24,673	14,131	13,523	1,106	0	0	0	53,433	68,723
2012	10,878	160	3,262	1,393	15,694	24,513	14,283	13,233	1,047	0	0	0	53,076	68,770
2013	11,256	239	3,841	5,575	20,910	23,728	10,678	13,378	348	253	0	0	48,386	69,296
2014	10,489	184	4,138	6,174	20,985	24,307	13,856	13,143	205	261	0	840	52,613	73,598

Source : Directorate General of New and Renewable Energy and Energy Conservation
Note : *) New Geothermal Field

Annex 1

METHODOLOGY AND TABLE EXPLANATION

GENERAL METHODS

Data shown in the tables of Indonesia's energy economic statistics are a consolidated from various statistics of regular publication with harmonization of format and definition also covering an estimate of energy demand using macro-economic approach. Data sources used are the statistic of published by: Statistic Indonesia, technical unit within Ministry of Energy and Mineral Resources, energy companies, energy associations and some International Agencies.

Statistics book used as the source of energy economic data consolidation, are as follows:

a. Crude Oil and Oil Products (BBM)
   - Indonesia Oil and Gas Statistics, Directorate General Oil and Gas 2000-2006

b. Natural Gas (Production, utilization and flaring)
   - Indonesia Oil and Gas Statistics, Directorate General Oil and Gas 2000-2006
   - PT PGN Annual Report, 2000-2013

c. Coal
   - Indonesia Coal Statistics, Directorate General of Geology and Mineral Resources 2000 and 2001
   - Indonesia Mineral and Coal Statistics Directorate of Mineral Coal and Geothermal 2002-2010 and 2012-2013

d. Biomass
   - National Survey on Social & Economic (SUSENAS) Statistic Indonesia (BPS), 1999, 2002,2005

e. LPG
   - Indonesia Oil and Gas Statistics, Directorate General Oil and Gas 2000-2006 and 2013

f. Electricity
   - PLN Statistics, 2000-2012
   - Statistics of Electricity, Directorate General of Electricity and Energy Utilization, 2000-2012

g. General
   - Indonesia Statistics, Statistics Indonesia
   - Finance and Economic Statistics, Bank Indonesia (www.bi.go.id)
   - Trade Statistics, Ministry of Trade, 2000-2012

TABLE 2: ENERGY BALANCE TABLE

Energy balance is an energy input-output system table, where the rows indicate activities of an energy commodity which consist of four main elements, namely: primary energy activity, transformation, own use & losses, and energy consumption. The columns, on the other hand, indicate the types of energy. Energy balance is presented to fully depict energy activities in a region.

ENERGY BALANCE DEFINITIONS

BY COLUMN

Each column of energy balance represents one type of energy. It begins from the left with renewable energy, then followed by, solid energy, gaseous, liquid, and electricity.

RENEWABLE ENERGY

Hydropower is the potential energy of flowing water. The energy is computed as input power to generate electricity and consists of dam, river stream, mini hydro and micro hydro. The amount of hydro energy required is equivalent to fossil energy required to generate electricity.

Geothermal is a kind energy that produced from the magma inside earth in the volcanic areas. The hot and high pressure steam emitted from the

production well head can be utilized to pressed the steam turbine in the Geothermal Power Generation or utilized directly for drying agriculture products.

Biomass is a kind of renewable organic material based fuel. Among the kinds of biomass are firewood (wood and wood waste), agriculture waste (rice hulks, rice straws, palm fronds, coconut shells, etc.), urban solid waste, and industrial waste.

SOLID ENERGY

Coal consists of hard coal and lignite. Data information on the volume of coal is only available in aggregate number. In the energy balanced table the conversion factor using average of Indonesia coal calorific factor (4,276 BOE per Ton Coal). Detail category and specification of coal available in Indonesia are as follows:

- Hard coal is a type of coal that has a calorific value of more than 5,700 kcal/kg (23.26 MJ/kg). Hard coal consists of steam coal, coking coal, bituminous coal, and anthracite.

- Steam coal is a type of coal that is used in boiler, steam generator and furnace. Included in this category are anthracite and bituminous coal. It has a gross calorific value of more than 23,865.0 kJ/kg (5,700 kcal/kg), lower than coking coal.

- Coking coal is a type of coal that is used to produce coke for use as reducing material in blast furnace. Its gross calorific value is higher than 23,865 kJ/kg (5,700 kcal/kg), ash free.Sub-bituminous coal is a type of coal that has a gross calorific value between 17,435.0 kJ/kg (4,165 kcal/kg) and 23,865.0 kJ/kg (5,700 kcal/kg).Anthracite is a type of coal that has similar characteristics as steam coal.

- Lignite is a type of coal that has a gross calorific value of less than 4,165 kcal/kg (17.44 MJ/kg) and volatile matter of more than 31%, dry basis. Lignite is often called low rank coal; also called brown coal.

- Coke is the product of high temperature carbonization of steam coal. The product is used as reducing agent in steel plant.

- Briquettes is the fuel produced by briquetting sub-bituminous coal, lignite, or peat through the process of carbonization or powdering. Briquette is more convenient to use and has better quality that its raw material.

GASEOUS

Energy in Gaseous form is includes of natural gas and town gas. Natural gas generally consists of methane which is mined from underground accumulation, and associated gas from oil production, as well as coal bed methane. Town gas covers all kinds of gas, including gas produced from carbonization process, gasification of petroleum oils, and gas produced from chemical conversion of hydrocarbon fossil fuels.

LIQUID

Crude oil is the mineral oil which consists of a mixture of hydrocarbons, blackish green color, and has a range of density and viscosity. It is the raw material for producing oil fuels (BBM) and petrochemical products.

Condensate is a kind of liquid hydrocarbons among which is natural gas liquid (NGL). NGL consists of ethane, propane, butane, pentane, and natural gasoline.

OIL FUELS/Petroleum Products, (BBM), Category BBM in the energy balance table is petroleum products used for energy. It is comprise of Avgas, Avtur, Mo-gas (Motor gasoline), Automotive Diesel Oil (HSD/ADO), Marine Diesel Fuel (MDF/IDO), Fuel Oil and Kerosene. Detail description of each fuels are as follows:

Avgas (aviation gasoline) is aircraft fuel that consists of light hydrocarbons distilling between 100ºC and 250ºC. The distillation product has at least 20% volume at 143ºC.

Avtur is the fuel for jet aircraft which consists of hydrocarbon middle distillate having similar distillation and flash point characteristics as kerosene, with maximum aromatic content of 20% volume. It has a freezing point less than –47ºC and octane number of 80–145 RON.

Mogas (motor gasoline) is light hydrocarbons used in motor vehicle internal combustion engine (not including aircraft). Mogas is distilled between 35ºC and 215ºC and is processed in Reformer, Catalytic Cracking, or Blending with aromatic fraction to achieve high octane number. In Indonesian market, three types of gasoline are available, namely Premium, Premix/Pertamax, and Super TT/Pertamax Plus.

- Premium has an octane number of about 89 RON
- Premix has octane number of about 94 RON
- Super TT has octane number of about 98 RON, and is lead free.

Diesel Oil is a refinery product that contains heavy gasoil. This type of BBM is obtained from the lowest fraction of crude oil atmospheric distillation, while the heavy gas oil is obtained from vacuum distillation of atmospheric distillation residue. In the market, diesel oil is distinguished into Automotive Diesel Oil (ADO/Minyak Solar) and Industrial Diesel Oil (IDO/Minyak Diesel).Fuel Oil (FO) is oil made of distillation residue. This type of BBM includes all kinds of residues including residue from blending. It has a viscosity of about 10 cSt at SOT. Its flash point is higher than SOT and density more than 0.9.

Kerosene is the BBM produced from crude oil distillation which has volatility between that of gasoline and gasoil. It has distillation range between 150ºC and 300ºC, where a minimum of 65% volume is distilled at 250ºC. It has a specific gravity of 0.8 and flash point of over 38ºC.

LPG is light hydrocarbon fraction of crude oil, produced in oil refinery, and consists of either propane (C_3H_8) and butane (C_4H_{10}) or mixture of both. In addition to oil refinery, LPG is also produced from natural gas purification.

Non BBM is Other Oil Products (OOP), include naphtha, lubricating oil, bitumen, paraffin, etc. (sulphur, grease).

Electricity, electric power produced from various kinds of power plant such as Hydro Power Plant (PLTA), Geothermal Power Plant (PLTP), Gas Power Plant (PLTG), Gas Steam Power Plant (PLTGU), Coal Steam Power Plant (Coal PLTU), and Diesel Power Plant (PLTD), etc.

LNG (liquefied natural gas) is the liquid produced by liquefying natural gas at a temperature of –160T to facilitate its transportation over very long distances.

Total is the total of all columns at certain row. At transformation row the total of all columns indicates efficiency of transformation process.

BY ROW of Energy Balance Table

Total Primary Energy Supply is domestic production plus import minus export minus bunker and minus or plus stock change. The bunker and stock change data, is not available.

Production, total gross primary energy produced (extracted) from underground.

Import is energy obtained from other countries, not including energy in transit.

Export is energy sold to other country.

ENERGY TRANSFORMATION

Transformation, is the transformation process from primary energy type into final energy type. This includes processes in LPG plant, and carbonizing plant. Input bears a negative sign while production bears positive sign.

Oil Refining is the processing of crude oil and condensate to produce oil fuels such as: naphtha, avgas, avtur, ADO, IDO, mogas, kerosene, fuel oil, LPG, etc. Energy consumption such as natural gas, naphta, are also included.

Gas Processing (LNG plant and LPG plant) the process of liquefaction or purification of natural gas to produce LNG or LPG.

Power Generation is transformation of energy into electric power. This row records the quantity of fuel consumed: (coal, BBM, natural gas, hydropower, geothermal, biomass, wind, photovoltaic (solar energy) etc and the electricity generated.

OWN USE AND LOSSES

Own Use and Losses include losses and own uses in primary energy production fields and in transformation processes.

- Losses and Own Use in Production Field are losses that occur due to transportation, distribution, and transfer by pipe. Own use includes all energy consumed in the field (off-road transportation, genset, boiler, etc., all energy consumed in transportation is computed in Transportation Sector).
- Losses and Own Use in Oil Refining are losses that occur due to transportation, distribution, and transfer by pipe. Own use is all energy consumed in oil refining processes.
- Losses and Own Use in Gas Processing are losses that occur due to transportation, distribution, and transfer by pipe. Own use is all energy consumed in gas processing.
- Losses in Electricity System, is losses incurred in transformer, transmission and distribution network.
- Own use in Electricity Generation is all energy consumed in power plant area.

Statistical Difference the different between net supply (production + import – export – transformation input + transformation production– own use and losses) and total final consumption (household, commercial, industry, and transportation).

FINAL ENERGY CONSUMPTION

Total Final Energy Consumption is the quantity of energy consumed in household, commercial, industry and transportation sectors and non-energy consumption.

Household, all energy consumption for household, not including consumption for private car.

Commercial, energy consumption of commercial sector such as: commerce, hotels, restaurants, financial institutions, government agencies, schools, hospitals, etc.

Industry, energy consumption of industry in the following sub-sectors (not including transportation): iron and steel, chemical, non-iron metal, non-metal production, machine and equipment, non-energy mining and quarrying, food, paper, wood, petrochemical, textile, etc.

Transportation, energy consumption for transportation covers all transportation activities in all sectors of economy. Transportation sub-sectors are: air transportation, land transportation (motor cycles, cars, buses, and trucks), ferries and railway transportation. A side for these sector energy is also consumed by one other sector which consist of the fishery, construction and mining subsectors.

Non-energy, energy consumption for non-energy uses, covering lubricating oils, petrochemical industry, raw materials (naphtha, natural gas, and cokes), and gas used as raw material for petrochemical products (methanol and ammonia/urea).

Annex 2

GLOSSARY

Automotive Diesel Oil (ADO)
A type of diesel oil used as fuel for high speed diesel engine.

Avgas
Aviation gasoline; special high octane gasoline for aircraft reciprocating engine, has high stability, low freezing point, and rather flat distillation curve.

Avtur
Aviation turbine fuel; special fuel for turbine/jet aircraft, a special kerosene with distillation range of 150°C - 250°C.

Biomass
Collective name for firewood, agriculture waste (rice husks, rice stems, palm fronds, coconut shells), black liquor, wood chips, wood barks.

BOE (Barrel Oil Equivalent)
Calorific equivalent of a barrel of crude oil.

Captive Power Plant
Power plant owned by industry to produce electricity for their own use.

Coal
Sedimentary rock originated from piles of wood since millions of years ago.

Coal Transformation
Processing of coal (coking coal, steam coal, sub-bituminous coal, and lignite) to produce coke, blast furnace gas, and briquet.

Commercial
Group of energy consumers which use energy for lighting, air conditioning, mechanical equipment, cooking appliance, and water heating but not including consumption for vehicles/ transportation. Energy consumers included in this group are commercial and general business such as: commerce, hotel, restaurant, financial institution, government agency, school, hospital, etc.

Condensate
Liquid extracted from natural gas; can be in the form liquid petroleum gas or natural gasoline.

Conversion Factor
Factor used to convert physical unit such as: liter, barrel, ton, and cubic meter to energy unit such as: Joule, BTU, ton coal equivalent (TCE), or barrel or ton oil equivalent (BOE or TCE).

Crude Oil
Mixture of hydrocarbons occurring in liquid phase in subsurface reservoir and remains liquid under atmospheric pressure.

Diesel Oil
A refinery product which contains heavy gasoil, and available as automotive diesel oil (ADO) or industrial diesel oil (IDO).

DPPU
Depo Pengisian Bahan Bakar Pesawat Udara (Aircraft Refueling Depot), serving AVGAS and AVTUR for aircraft consumption.

Electricity
Electric power produced in electric power plant such as Hydro Power Plant (PLTA), Geothermal Power Plant (PLTP), Gas Power Plant (PLTG), Gas Steam Power Plant (PLTGU), Coal Steam Power Plant (Coal PLTU), Diesel Power Plant (PLTD), etc.

Energy Balance Table
Energy system input-output table, the rows indicate activities of an energy commodity which consists of four main elements, namely primary energy, transformation, own use & losses, and energy consumption. The columns indicate the type of energy commodity.

Final Energy
Energy which can be directly consumed by user.

Final Energy Consumption
Energy consumption of four sectors of energy consumers, namely: household sector, commercial sector, industry sector, and transportation sector as well as consumption of energy as raw material and reduction agent. In compiling REP Riau, household sector is combined with commercial sector due to the limited data obtained.

Final Stock
Total stock at the end of the year.

Fuel Oil
Lowest order refinery product; heavy distillate, residue and their mixture which is used as fuel in industrial furnace and electric power plant.

Gasoline
(see mogas)

Gas Process
LNG plant or LPG plant, liquefaction or purification process to produce LNG and LPG.

GDP at Constant Price
Added value of goods and services computed on the basis of prices in a certain year.

GDP, Nominal (based on current price)
Added value of goods and services computed on the basis of the price occurring in each year.

Goods and Services Export
All transfer and sale of goods and services from resident of a country to resident of another country, including those conducted in the same country or in another country. Value of good export is based on FOB.

Government Consumption
Expenditures for employees expenses, depreciation and purchase of goods and services (including travel expenses, maintenance and other routine expenditures), expended by central government or regional governments but not including receipt from result of production of goods and services.

Household
Group of energy consumers which use energy for cooking, lighting, and household appliances but not including energy consumption for private car.

Hydropower
Potential energy of flowing water, computed as input energy to generate electric power, consists of dam, river stream, microhydro.

Import
Purchase from other country, not including the one in transit.

Industrial Diesel Oil (IDO)
A type of diesel oil used as fuel in low or medium speed industrial diesel engine (and marine engine).

Industry
Group of energy consumers which use energy for industrial process such as steam boiler, direct heating, lighting, and mechanical equipment, but does not include energy used for electricity generation for such industries: iron and steel, chemical, non-iron metal, non-metal production, food, paper, wood, construction, textile etc.

Initial Stock
Total stock at the beginning of the year.

International Bunker
Energy consumption for international shipping, supplied to international ships for all ships bearing any flag.

Kerosene
A type of oil fuel produced from distillation process which volatility lies between that of mogas and diesel oil, used as fuel for lighting, kitchen stove, and outboard engine.

Losses in Electricity Generation
Losses that occur in transformer, transmission and distribution network.

LPG
Liquefied Petroleum Gas, light hydrocarbons of crude oil, produced from oil refinery process or purification process of natural gas, consisting of propane (C_3H_8) and butane (C_4H_{10}) or their mixture.

LSWR
Low Sulphur Waxy Residue, a by product of oil refining.

Mogas
Motor gasoline, light hydrocarbon oil used in internal combustion engine, except aircraft engine, available in the market as Premium, Premix, Super TT, and BB2L.

Money Supply (M2)
Money supply consisting of currency (*kartal*) and demand deposits (*giral*).

Natural Gas
All kinds of hydrocarbon gas produced from wells; mixture of hydrocarbon gas and vapour occurring naturally, which main components are methane, ethane, propane, butane, pentane, and hexane; mined from underground accumulation either directly or as associated gas in oil mining.

Natural Gas Liquid
(see Condensate)

Non-energy Consumption
Consumption of energy for non-energy consumption which includes lubricating oil, petrochemical industry raw material (naphtha, natural gas, and coke), and gas consumed chemical raw material (methanol and ammonia/urea).

Non-renewable Energy
Energy which reserve cannot be brought back into original condition, generally consists of fossil energy.

Oil Refinery
Crude oil or condensate processing unit to produce oil fuels such as naphtha, avgas, avtur, ADO, IDO, mogas, kerosene, fuel oil, LPG, etc.

Other Oil Products (OOP)
Other refinery products such as naphtha, lubricating oil, bitumen, paraffin, etc. (sulphur, grease).

Own Use and Losses
Category that include energy losses and energy used in primary energy production field and in each transformation.

Own Use in Electricity Generation
Own use is all energy consumed in power plant and the transmission and distribution sub-station.

Own Use and Losses in Gas Processing
Losses that occur due to transport, distribution, and transfer by pipe. Own use is all energy consumed in gas processing.

Own Use and Losses in Oil Refinery
Losses that occur due to transportation, distribution, and transfer by pipe. Own use is all energy consumes in oil refinery processes.

Own Use and Losses in Production Field
Losses that occur due to transport, distribution, and transfer by pipe. Own use is all energy consumed in production field.

PLN Power Plant
Electric power plant owned by PT PLN (Persero) to produce electricity for sale to the public.

Primary Energy
Energy in its original form which is extracted by means of mining, dam, or renewable energy utilization.

Private Sector Power Plant
Power plant owned by private sector to produce electricity for sale to the public. Known as Independent Power Producer (IPP).

Production
Total gross primary energy extracted/produced.

Quasy Money
Time deposit and saving, in Rupiah and foreign exchange, including foreign exchange deposit by residents.

Renewable Energy
Energy which reserve can be brought back into original condition.

SBM
(see BOE)

Secondary Energy
Energy which has undergone transformation process into other form of energy.

SPBU
Stasiun Pengisian BBM Umum, public oil fuel refueling station, which sells gasoline (Premium, Premix, and Super TT) and diesel oil (ADO).

Statistical Difference
Difference between net supply (production + import – export – international bunker – stock change – consumption for transformation + production from transformation – own use – losses) and total final consumption.

Stock Change
Difference between the stock in the beginning and the end of the year. Stock decrease in energy balance is shown by positive sign which means there is increase in supply, while stock increase is shown by negative sign which means there is decrease in supply.

Sub-bituminous coal
A type of coal which has calorific value of 5,000–6,000 kcal/kg.

Total Energy Balance
Total of all columns in a certain row. In transformation row, the total of columns indicates efficiency of the transformation process.

Total Final Energy Consumption
Sum of energy consumption in the following sectors: household, commercial, industry, transportation, and non-energy consumption.

Total Primary Energy Supply
Local production plus import less export less bunker and less or plus stock change.

Transportation
Group of energy consumers which use energy for transport vehicles.

Annex 3

CONVERSION FACTOR

Energy	Original Unit	Multiplier Factor to BOE (Barrel Oil Equivalent)
Coal		
Anthracite	Ton	4.9893
Imported Coal	Ton	4.2766
Kalimantan Coal	Ton	4.2766
Ombilin Coal	Ton	4.8452
Tanjung Enim Coal	Ton	3.7778
Lignite	Ton	3.0649
Riau Peat	Ton	2.5452
Briquette	Ton	3.5638
Biomass		
Charcoal	Ton	4.9713
Firewood	Ton	2.2979
Natural Gas	MSCF	0.1796
Gas Products		
City Gas	Thousand KKal	0.0007
CNG	Thousand KKal	0.0007
LNG	Ton	8.0532
LNG	MMBTU	0.1796
LPG	Ton	8.5246

CONVERSION FACTOR (continued)

Energy	Original Unit	Multiplier Factor to BOE (Barrel Oil Equivalent)
Oil		
Condensate	Barrel	0.9545
Crude Oil	Barrel	1.0000
Oil Fuel		
Aviation Gasoil (Avgas)	Kilo Liter	5.5530
Aviation Turbin Gas (Avtur)	Kilo Liter	5.8907
Super TT	Kilo Liter	5.8275
Premix	Kilo Liter	5.8275
Premium	Kilo Liter	5.8275
Kerosene	Kilo Liter	5.9274
ADO	Kilo Liter	6.4871
IDO	Kilo Liter	6.6078
FO	Kilo Liter	6.9612
Oil Products		
Other Oil Products	Barrel	1.0200
Refinery Fuel		
Refinery Fuel Gas (RFG)	Barrel	1.6728
Refinery Fuel Oil (RFO)	Barrel	1.1236
Feed Stock	Barrel	1.0423
Electric Power	MWh	0.6130

Sources : Neraca Energi 1990-1994, Departemen Pertambangan dan Energi

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