

1.01 Population, area, gross prefectural product and electricity consumed by prefecture (1)

Prefecture	Population					Total land area 2016 (km ²)	Forest area (As of Feb.1, 2016) (Thousand ha)
	2000	2005	2010	2015	2016		
Nationwide	126,925,843	127,767,994	128,057,352	127,110,047	127,094,745	377,971.57	24,433
Hokkaido	5,683,062	5,627,737	5,506,419	5,383,579	5,381,733	83,423.82	5,319
Aomori	1,475,728	1,436,657	1,373,339	1,308,649	1,308,265	9,645.56	616
Iwate	1,416,180	1,385,041	1,330,147	1,279,814	1,279,594	15,275.01	1,144
Miyagi	2,365,320	2,360,218	2,348,165	2,334,215	2,333,899	* 7,282.22	407
Akita	1,189,279	1,145,501	1,085,997	1,022,839	1,023,119	11,637.52	820
Yamagata	1,244,147	1,216,181	1,168,924	1,122,957	1,123,891	* 9,323.15	641
Fukushima	2,126,935	2,091,319	2,029,064	1,913,606	1,914,039	13,783.74	937
Ibaraki	2,985,676	2,975,167	2,969,770	2,917,857	2,916,976	6,097.12	189
Tochigi	2,004,817	2,016,631	2,007,683	1,974,671	1,974,255	6,408.09	341
Gunma	2,024,852	2,024,135	2,008,068	1,973,476	1,973,115	6,362.28	406
Saitama	6,938,006	7,054,243	7,194,556	7,261,271	7,266,534	* 3,797.75	121
Chiba	5,926,285	6,056,462	6,216,289	6,224,027	6,222,666	* 5,157.64	157
Tokyo	12,064,101	12,576,601	13,159,388	13,513,734	13,515,271	* 2,191.00	78
Kanagawa	8,489,974	8,791,597	9,048,331	9,127,323	9,126,214	2,415.92	94
Niigata	2,475,733	2,431,459	2,374,450	2,305,098	2,304,264	* 12,584.18	790
Toyama	1,120,851	1,111,729	1,093,247	1,066,883	1,066,328	* 4,247.61	240
Ishikawa	1,180,977	1,174,026	1,169,788	1,154,343	1,154,008	4,186.09	276
Fukui	828,944	821,592	806,314	787,099	786,740	4,190.49	310
Yamanashi	888,172	884,515	863,075	835,165	834,930	* 4,465.27	347
Nagano	2,215,168	2,196,114	2,152,449	2,099,759	2,098,804	* 13,561.56	1,023
Gifu	2,107,700	2,107,226	2,080,773	2,032,533	2,031,903	* 10,621.29	841
Shizuoka	3,767,393	3,792,377	3,765,007	3,701,181	3,700,305	* 7,777.43	492
Aichi	7,043,300	7,254,704	7,410,719	7,484,094	7,483,128	* 5,172.90	218
Mie	1,857,339	1,866,963	1,854,724	1,815,827	1,815,865	* 5,774.41	372
Shiga	1,342,832	1,380,361	1,410,777	1,413,184	1,412,916	* 4,017.38	203
Kyoto	2,644,391	2,647,660	2,636,092	2,610,140	2,610,353	4,612.19	342
Osaka	8,805,081	8,817,166	8,865,245	8,838,908	8,839,469	1,905.14	57
Hyogo	5,550,574	5,590,601	5,588,133	5,536,989	5,534,800	8,400.93	561
Nara	1,442,795	1,421,310	1,400,728	1,365,008	1,364,316	3,690.94	284
Wakayama	1,069,912	1,035,969	1,002,198	963,850	963,579	4,724.71	362
Tottori	613,289	607,012	588,667	573,648	573,441	3,507.13	257
Shimane	761,503	742,223	717,397	694,188	694,352	6,708.24	520
Okayama	1,950,828	1,957,264	1,945,276	1,922,181	1,921,525	* 7,114.47	484
Hiroshima	2,878,915	2,876,642	2,860,750	2,844,963	2,843,990	8,479.47	610
Yamaguchi	1,527,964	1,492,606	1,451,338	1,405,007	1,404,729	6,112.34	436
Tokushima	824,108	809,950	785,491	756,063	755,733	4,146.79	312
Kagawa	1,022,890	1,012,400	995,842	976,756	976,263	* 1,876.73	87
Ehime	1,493,092	1,467,815	1,431,493	1,385,840	1,385,262	5,676.19	400
Kochi	813,949	796,292	764,456	728,461	728,276	7,103.93	592
Fukuoka	5,015,699	5,049,908	5,071,968	5,102,871	5,101,556	* 4,986.40	222
Saga	876,654	866,369	849,788	833,245	832,832	2,440.68	111
Nagasaki	1,516,523	1,478,632	1,426,779	1,377,780	1,377,187	4,132.20	241
Kumamoto	1,859,344	1,842,233	1,817,426	1,786,969	1,786,170	* 7,409.44	448
Oita	1,221,140	1,209,571	1,196,529	1,166,729	1,166,338	* 6,340.74	448
Miyazaki	1,170,007	1,153,042	1,135,233	1,104,377	1,104,069	* 7,735.31	587
Kagoshima	1,786,194	1,753,179	1,706,242	1,648,752	1,648,177	* 9,186.99	585
Okinawa	1,318,220	1,361,594	1,392,818	1,434,138	1,433,566	2,281.14	105

Note: When a prefecture shares an area of which boundaries are not yet fixed with other prefecture(s), that prefecture is indicated with *, and the figure for it is for reference purpose.

Source: Population: Compiled using data in "Population Census" and "Population Estimates" by Population Census Division, Statistical Survey Department, Statistics Bureau, Ministry of Internal Affairs and Communications
As for 2010, compiled using data in "Population Census Report 2010 Population Basic Statistics" (<http://www.stat.go.jp/data/kokusei/2010/>)
Also, for 2015, compiled using data from "2015 Population Census of Japan -- Results of Preliminary Counts of the Population and Households." (<http://www.stat.go.jp/data/kokusei/2015/kekka.htm>)
As for 2016, compiled using data in "Population Census Report 2016 Population Basic Statistics" (<http://www.stat.go.jp/data/kokusei/2016/kekka.htm>)
Total land area: Compiled from "Municipalities Area Statistics of Japan, Oct 1st 2016" Ministry of Land, Infrastructure, Transport and Tourism, Geospatial Information Authority of Japan, WEBSITE/GIS Information of the territory (<http://www.gsi.go.jp/KOKUJYOHO/MENCHO201610-index.html>)
Forrest area: Compiled from "World Census of Agriculture Forestry 2016" (As of Mar. 25, 2016) (http://www.maff.go.jp/j/tokei/census/afc/2015/kekka_gaisuuti.html)

1.01 Population, area, gross prefectural product and electricity consumed by prefecture (2)

Prefecture	Land use					Natural park area (March 31, 2017) (ha)	City park area (The end of March, 2016) (ha)
	Area of private land FY2015 (km ²)	Building lot	Paddy fields	Field	Forest and mountains		
Nationwide	162,364	16,933	26,054	24,043	79,786	5,565,967	98,140
Hokkaido	27,333	1,042	2,364	8,570	10,911	867,540	11,350
Aomori	3,952	296	867	719	1,537	114,187	2,021
Iwate	7,767	319	972	661	5,190	72,061	1,433
Miyagi	3,689	402	1,120	314	1,658	171,199	2,334
Akita	4,341	252	1,310	232	1,942	123,801	1,555
Yamagata	3,530	253	1,000	338	1,642	155,509	1,846
Fukushima	5,632	413	1,013	711	3,011	179,096	2,232
Ibaraki	4,169	687	925	996	1,206	90,896	2,677
Tochigi	3,177	438	967	355	1,112	133,443	2,740
Gunma	2,454	422	262	588	910	88,864	2,556
Saitama	2,265	684	398	491	479	124,582	4,321
Chiba	3,515	739	837	611	921	28,537	3,177
Tokyo	1,035	574	3	93	297	79,889	3,077
Kanagawa	1,247	596	47	189	283	55,138	2,198
Niigata	4,941	463	1,579	345	2,190	316,891	2,172
Toyama	1,361	239	596	59	375	125,554	1,610
Ishikawa	1,603	191	401	145	765	52,564	1,511
Fukui	1,526	161	386	51	860	61,912	1,177
Yamanashi	1,318	171	106	265	650	121,153	786
Nagano	4,698	474	644	686	2,266	278,548	2,513
Gifu	4,509	361	450	184	3,238	195,093	1,945
Shizuoka	4,091	558	280	601	2,279	84,041	2,020
Aichi	2,642	847	474	391	699	88,881	4,101
Mie	2,737	345	498	210	1,493	201,896	1,660
Shiga	1,572	227	501	56	685	149,957	1,252
Kyoto	1,540	221	264	93	869	94,589	1,256
Osaka	885	515	110	40	146	20,039	2,975
Hyogo	3,940	572	707	123	2,275	166,015	4,175
Nara	1,377	152	187	80	878	63,328	1,730
Wakayama	2,315	152	143	249	1,713	49,551	695
Tottori	1,354	107	252	152	678	49,061	650
Shimane	3,337	137	369	157	2,524	40,496	1,057
Okayama	4,132	354	615	254	2,682	80,664	1,541
Hiroshima	4,192	361	506	254	2,857	37,857	2,041
Yamaguchi	3,418	273	464	164	2,329	42,971	1,873
Tokushima	1,742	132	214	172	1,185	38,706	537
Kagawa	1,177	181	273	129	537	20,534	1,562
Ehime	3,233	228	279	456	2,183	41,121	1,499
Kochi	3,194	102	250	143	2,623	47,504	689
Fukuoka	2,774	632	698	279	897	88,101	2,121
Saga	1,583	161	447	221	635	26,884	818
Nagasaki	2,044	201	273	444	928	74,091	1,409
Kumamoto	3,801	330	703	582	1,856	155,636	733
Oita	2,749	214	445	270	1,472	174,391	1,201
Miyazaki	2,558	244	381	389	1,337	91,919	1,971
Kagoshima	4,875	369	459	1,077	2,502	123,449	1,882
Okinawa	1,041	141	13	456	80	77,828	1,465

Source: Area of private land:

Ministry of Internal Affairs and Communications WEBSITE/ Statistic on local taxes
http://www.soumu.go.jp/main_sosiki/jichi_zeisei/czaisei/czaisei_seido/ichiran08.html
 Compiled using data from "Outline (land) of the record prices of fixed assets FY2015
 (tentative translation)"

Natural parks' area:

National Park Division WEBSITE/Nature conservation data
 Nature Conservation Bureau, Ministry of the Environment
 Compiled using data from "Review of Natural Parks' Area by prefecture"
<http://www.env.go.jp/park/doc/data>

Urban parks' area:

Ministry of Land, Infrastructure, Transport and Tourism
 "A table of improvement status of urban parks"
http://www.mlit.go.jp/crd/park/joho/database/t_kokuen/index.html

1.01 Population, area, gross prefectural product and electricity consumed by prefecture (3)

Prefecture	Cultivated land area (2016) ¹⁾							Cultivated rate (%) ³⁾	Paddy field rate (%) ⁴⁾
	Total of Paddy fields and Upland filed (ha)	Field proper ²⁾	Paddy field	Field					
					Ordinary field	Land under permanent crops	Short-time Meadow		
Nationwide	4,471,000	4,292,000	2,432,000	2,039,000	1,149,000	287,100	603,400	12.0	54.4
Hokkaido	1,146,000	1,129,000	222,600	923,600	415,800	2,930	504,800	14.6	19.4
Aomori	152,300	148,100	80,700	71,600	34,500	22,700	14,500	15.8	53.0
Iwate	150,800	142,800	94,500	56,300	25,100	3,640	27,600	9.9	62.7
Miyagi	128,500	124,000	105,700	22,900	15,700	1,320	5,810	17.6	82.3
Akita	149,000	143,500	130,100	18,800	12,000	2,430	4,430	12.8	87.3
Yamagata	119,400	114,400	94,300	25,100	12,400	10,500	2,250	12.8	79.0
Fukushima	143,200	137,400	100,400	42,800	30,500	6,820	5,480	10.4	70.1
Ibaraki	169,200	166,800	98,000	71,200	64,000	6,840	364	27.8	57.9
Tochigi	124,200	120,900	96,900	27,200	22,400	2,250	2,570	19.4	78.0
Gunma	70,900	68,400	26,800	44,100	39,300	3,300	1,500	11.1	37.8
Saitama	75,800	74,600	42,000	33,800	30,600	3,090	68	20.0	55.4
Chiba	126,300	122,700	74,300	52,000	48,100	3,410	498	24.5	58.8
Tokyo	7,000	6,900	269	6,730	5,060	1,610	62	3.2	3.8
Kanagawa	19,400	18,900	3,790	15,700	12,000	3,680	-	8.0	19.5
Niigata	171,300	162,100	151,900	19,400	16,300	2,310	814	13.6	88.7
Toyama	58,700	56,600	56,100	2,540	1,560	735	246	13.8	95.6
Ishikawa	41,800	40,600	34,800	6,980	5,180	1,300	504	10.0	83.3
Fukui	40,500	39,500	36,700	3,760	2,720	783	263	9.7	90.6
Yamanashi	24,000	23,200	7,980	16,000	4,890	10,300	857	5.4	33.3
Nagano	108,000	98,500	53,500	54,500	35,900	15,400	3,300	8.0	49.5
Gifu	56,700	53,300	43,400	13,200	8,820	3,250	1,160	5.3	76.5
Shizuoka	67,100	64,700	22,500	44,600	15,800	27,700	1,150	8.6	33.5
Aichi	76,300	72,700	43,300	33,000	26,900	5,720	383	14.8	56.7
Mie	59,900	56,900	45,200	14,700	8,580	6,050	26	10.4	75.5
Shiga	52,400	50,100	48,300	4,090	2,980	1,040	66	13.0	92.2
Kyoto	30,800	28,900	24,000	6,740	3,640	3,030	68	6.7	77.9
Osaka	13,100	12,500	9,320	3,760	1,740	2,020	-	6.9	71.1
Hyogo	74,700	68,400	68,200	6,470	4,500	1,650	324	8.9	91.3
Nara	21,400	19,800	15,200	6,190	2,530	3,630	37	5.8	71.0
Wakayama	33,300	31,700	9,740	23,600	2,410	21,100	32	7.0	29.2
Tottori	34,700	31,900	23,600	11,100	8,570	1,660	869	9.9	68.0
Shimane	37,200	34,000	30,000	7,220	5,270	1,430	526	5.5	80.6
Okayama	65,900	59,900	51,600	14,400	9,990	3,700	678	9.3	78.3
Hiroshima	55,600	50,400	41,400	14,200	7,640	5,750	848	6.6	74.5
Yamaguchi	48,100	43,500	39,300	8,700	5,360	3,010	334	7.9	81.7
Tokushima	29,500	28,700	19,900	9,630	5,600	3,920	103	7.1	67.5
Kagawa	30,800	28,600	25,600	5,210	2,210	2,980	20	16.4	83.1
Ehime	49,900	46,800	23,000	26,900	6,170	20,500	196	8.8	46.1
Kochi	27,800	26,300	21,000	6,830	2,910	3,720	205	3.9	75.5
Fukuoka	83,900	80,000	66,500	17,400	8,130	9,090	223	16.8	79.3
Saga	52,600	50,000	42,800	9,820	4,240	5,530	51	21.6	81.4
Nagasaki	48,000	44,300	22,000	26,000	19,600	6,120	300	11.6	45.8
Kumamoto	112,000	104,000	67,700	44,200	22,600	14,800	6,810	15.1	60.4
Oita	56,100	52,000	40,000	16,100	8,820	4,530	2,740	8.8	71.3
Miyazaki	67,600	64,200	36,700	30,900	25,200	4,510	1,150	8.7	54.3
Kagoshima	120,400	113,100	38,600	81,800	65,000	13,600	3,230	13.1	32.1
Okinawa	38,200	37,000	838	37,400	29,500	1,940	5,910	16.7	2.2

Notes:

1) Cultivated land : Land area intended for cultivation and including attached dyke.

2) Land proper is used to grow crops and attached dyke is excluded.

3) Cultivated rate: Percentage (%) of cultivated land area (paddy field area + upland field) to total land area.
Total land area is by Geospatial Information Authority of Japan.

4) Paddy field rate: Percentage of paddy field in cultivated land area (paddy field area + upland field).

Source: Compiled using data from "Arable land and cropping area statistics" (published on February 13, 2017)
by Ministry of Agriculture, Forestry and Fisheries
(<http://www.e-stat.go.jp/SG1/estat/List.do?lid=000001118102>)

1.01 Population, area, gross prefectural product and electricity consumed by prefecture (4)

Prefecture	Gross Prefectural Product (Nominal) (Unit: million yen)							Quantity of electricity used (Unit: million kWh) ^{1) 2)}			
	FY 2010	FY 2011	FY 2014	Primary industries	Secondary industries	Tertiary industries	Taxes and duties on import goods	FY 2012	FY 2013	FY 2014	FY 2015
Nationwide	495,637,724	497,411,060	514,296,287	5,140,846	124,818,047	380,239,653	7,902,269	286,220	284,341	273,103	266,850
Hokkaido	18,428,392	18,263,055	18,484,615	749,251	3,125,835	14,607,114	137,400	11,818	11,595	11,237	11,070
Aomori	4,474,760	4,404,529	4,427,910	170,968	974,239	3,296,163	21,500	2,911	2,867	2,768	2,720
Iwate	4,096,965	4,179,680	4,647,038	143,183	1,323,061	3,128,667	82,654	2,889	2,876	2,819	2,769
Miyagi	8,045,272	7,632,961	8,895,851	96,097	2,353,208	6,424,260	87,045	5,006	5,000	4,921	4,819
Akita	3,526,125	3,463,505	3,458,566	96,233	699,419	2,661,944	19,337	2,346	2,305	2,227	2,177
Yamagata	3,739,070	3,650,352	3,754,564	129,104	964,945	2,623,908	66,881	2,573	2,518	2,470	2,385
Fukushima	7,126,334	6,432,386	7,399,862	98,828	2,573,211	4,664,840	131,980	4,187	4,145	4,106	4,017
Ibaraki	11,188,477	11,462,562	11,612,394	220,617	4,159,398	7,124,223	206,944	6,285	6,221	6,021	5,974
Tochigi	7,807,794	7,813,595	8,182,902	116,790	3,247,843	4,754,216	144,820	4,385	4,337	4,202	4,158
Gunma	7,427,842	7,644,016	8,005,480	105,575	3,231,203	4,581,000	142,430	4,499	4,438	4,278	4,236
Saitama	20,108,381	20,370,029	20,914,429	115,781	5,180,210	15,379,791	371,928	14,675	14,576	13,971	13,751
Chiba	19,005,963	18,799,527	20,044,937	217,804	4,326,548	15,301,399	356,996	12,571	12,457	11,917	11,776
Tokyo	91,139,263	92,387,777	94,902,086	48,797	10,715,916	84,245,021	445,427	29,984	29,784	28,509	28,097
Kanagawa	29,757,052	30,422,165	30,322,048	57,487	6,424,944	23,521,405	539,727	18,175	18,055	17,263	16,974
Niigata	8,606,775	8,712,110	8,699,072	160,731	2,282,390	6,170,013	154,937	5,242	5,103	4,955	4,819
Toyama	4,370,400	4,463,522	4,452,554	36,713	1,527,620	2,846,565	79,346	3,076	3,051	2,997	2,918
Ishikawa	4,264,966	4,217,520	4,588,046	37,648	1,246,834	3,257,084	81,696	3,322	3,298	3,237	3,159
Fukui	3,302,825	3,235,861	3,129,992	26,845	913,405	2,158,503	54,828	2,354	2,334	2,291	2,217
Yamanashi	3,123,259	3,143,441	3,118,690	52,370	994,341	2,042,716	55,574	1,982	1,986	1,915	1,881
Nagano	8,024,077	7,950,268	7,886,952	142,302	2,427,464	5,232,363	140,349	5,085	5,009	4,884	4,710
Gifu	7,093,400	7,123,625	7,208,829	68,275	2,214,279	4,848,937	128,285	4,681	4,633	4,454	4,309
Shizuoka	15,765,640	15,564,207	15,442,514	151,504	6,172,341	8,952,827	274,806	8,189	8,134	7,853	7,690
Aichi	31,642,329	31,881,502	35,990,293	156,403	13,723,856	21,714,532	694,607	16,117	16,062	15,322	14,831
Mie	7,368,128	7,091,928	7,656,376	83,587	3,084,285	4,433,429	135,452	4,270	4,265	4,074	3,955
Shiga	6,013,854	5,750,090	5,845,873	37,944	2,338,485	3,406,302	104,023	3,439	3,401	3,274	3,144
Kyoto	9,372,569	9,845,602	10,053,754	39,738	2,655,583	7,247,418	178,855	6,345	6,255	5,947	5,703
Osaka	36,384,314	36,600,004	37,933,987	36,287	6,916,578	30,200,723	1,158,530	20,039	19,771	18,656	17,918
Hyogo	18,346,170	18,313,629	19,788,071	97,368	5,374,073	14,131,581	352,626	12,957	12,746	12,095	11,626
Nara	3,551,806	3,500,992	3,540,714	22,573	743,728	2,731,749	60,460	3,231	3,197	3,037	2,919
Wakayama	3,503,380	3,541,483	3,579,029	63,092	1,150,938	2,321,970	63,607	2,663	2,649	2,528	2,434
Tottori	1,836,172	1,765,961	1,779,178	36,708	316,666	1,405,592	31,641	1,457	1,450	1,398	1,360
Shimane	2,325,350	2,395,905	2,382,265	36,956	558,823	1,761,719	42,408	1,818	1,817	1,756	1,726
Okayama	7,064,698	7,222,681	7,242,774	73,327	2,205,356	4,891,389	128,979	4,907	4,888	4,707	4,572
Hiroshima	10,808,039	11,061,197	11,237,887	79,813	3,242,925	7,889,001	114,742	7,071	7,050	6,789	6,592
Yamaguchi	5,752,238	5,643,005	5,969,042	36,097	2,292,400	3,573,328	106,165	3,514	3,531	3,387	3,299
Tokushima	2,819,974	2,863,274	3,012,328	56,900	984,523	1,939,977	53,635	1,996	1,990	1,912	1,845
Kagawa	3,571,168	3,731,428	3,672,273	45,447	894,765	2,736,438	20,013	2,540	2,542	2,440	2,361
Ehime	4,887,896	5,100,033	4,756,495	90,200	1,185,870	3,437,941	77,587	3,458	3,457	3,318	3,206
Kochi	2,158,415	2,164,634	2,349,510	92,914	369,282	1,862,520	42,265	1,804	1,798	1,733	1,678
Fukuoka	18,041,898	17,945,938	18,112,171	129,107	3,468,327	14,312,677	320,410	11,401	11,539	10,943	10,825
Saga	2,867,595	2,673,583	2,737,221	72,453	770,321	1,860,331	48,647	1,938	1,948	1,870	1,844
Nagasaki	4,377,020	4,409,382	4,310,310	111,936	698,386	3,454,595	76,786	3,161	3,166	3,035	2,989
Kumamoto	5,559,799	5,611,936	5,599,928	190,936	1,225,719	4,122,901	98,713	4,026	4,062	3,906	3,840
Oita	4,293,466	4,255,542	4,142,638	90,986	1,197,444	2,815,368	73,487	2,791	2,813	2,705	2,652
Miyazaki	3,496,699	3,498,167	3,643,441	158,375	818,582	2,622,718	68,586	2,491	2,514	2,440	2,394
Kagoshima	5,446,148	5,438,005	5,330,338	197,293	961,053	4,118,266	94,919	3,702	3,750	3,620	3,556
Okinawa	3,725,567	3,795,466	4,051,060	61,503	561,425	3,424,229	30,236	2,852	2,955	2,917	2,953

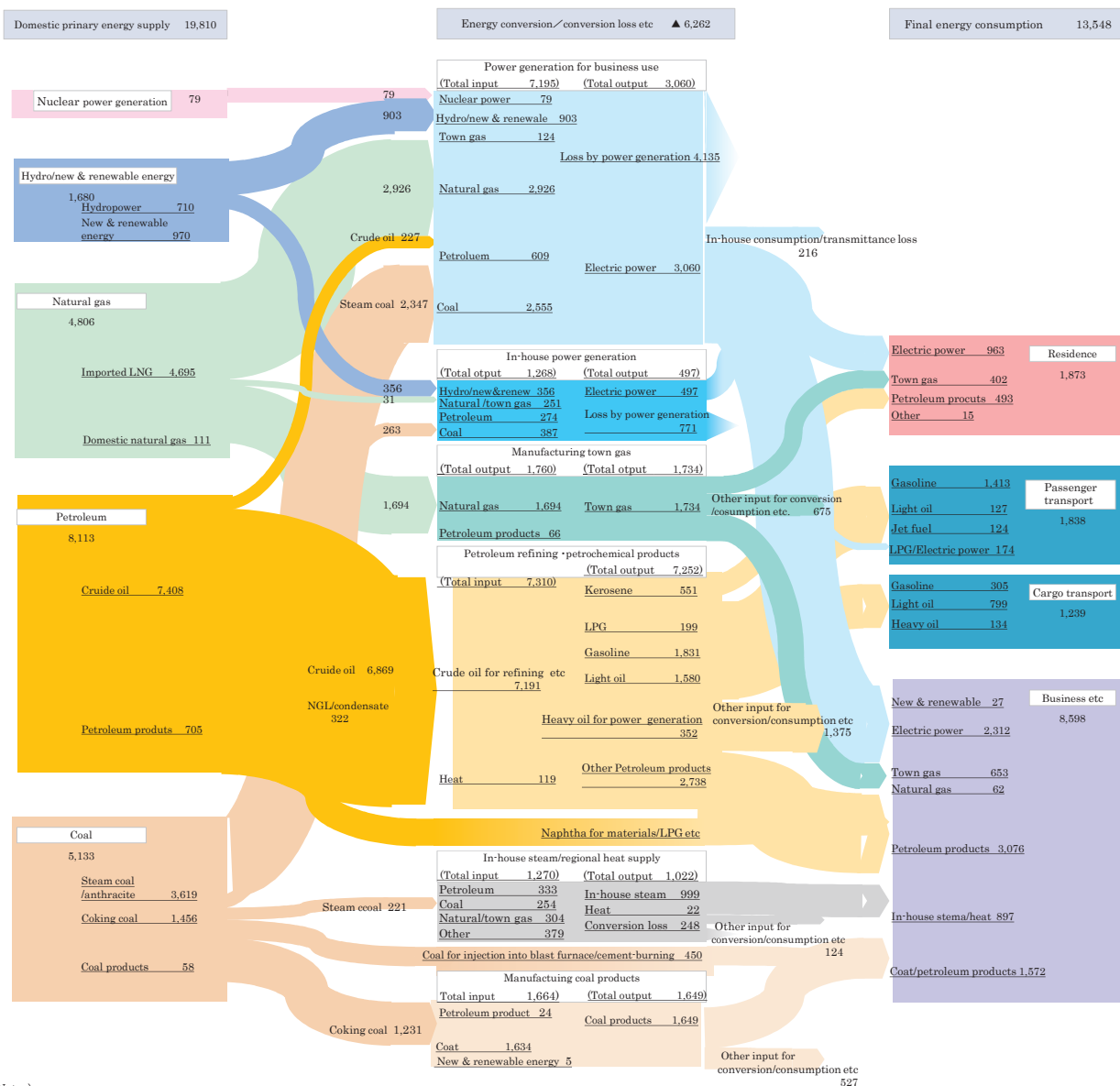
Notes:

- 1) Quantity of electricity used is a sum of data from 10 electric companies.
- 2) Due to rounding up/down, each number and totals may not be consistent.

Source: Prefectural gross product:
 "Annual Report of Prefectural Accounts, "
 Economic and Social Research Institute, Cabinet Office

Energy use:
 "Handbook of Electric Utilities " by Statistics Committee Federation of Electric Utility Companies

1.02 Chart of Japan's energy balance flow (FY2016)

単位: 10¹⁵J

Notes)

- This chart presents the outline of Japan's energy flow, and does not show the detail of the flows.
- "Petroleum" includes petroleum products, in addition to crude oil, NGL, and condensate.
- "Coal" includes coal products in addition to steam coal and anthracite.

Source: "Energy White Paper 2016," Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry

1.03 Trends in total amount of domestic primary energy supply

(Unit : 10¹⁵J)

	Total	Comparison with the previous year (%)	Breakdown												
			Crude oil	Coal	Coal products	Oil products	Natural gas	Nuclear power	Hydroelectric power for business	Unutilized energy	Solar energy	Geothermal energy	Biomass energy	Natural temperature fluctuate power	Wind energy
FY 1990	20,202.0	-	9,163.7	3,352.0	15.4	2,341.2	2,059.2	1,884.5	809.5	304.2	57.8	16.2	198.5	0.0	0.0
			45.4%	16.6%	0.1%	11.6%	10.2%	9.3%	4.0%	1.5%	0.3%	0.1%	1.0%	0.0%	0.0%
1991	20,412.8	1.0%	9,161.7	3,476.0	19.3	2,134.5	2,165.6	1,986.9	886.4	310.3	56.0	16.5	199.8	0.0	0.0
			44.9%	17.0%	0.1%	10.5%	10.6%	9.7%	4.3%	1.5%	0.3%	0.1%	1.0%	0.0%	0.0%
1992	20,900.0	2.4%	9,816.9	3,366.7	13.1	2,083.0	2,220.9	2,075.4	749.6	309.4	53.3	16.6	195.0	0.0	0.0
			47.0%	16.1%	0.1%	10.0%	10.6%	9.9%	3.6%	1.5%	0.3%	0.1%	0.9%	0.0%	0.0%
1993	21,206.2	1.5%	9,847.6	3,383.3	12.6	1,917.1	2,284.2	2,322.3	869.5	314.2	52.8	16.6	186.0	0.0	0.0
			46.4%	16.0%	0.1%	9.0%	10.8%	11.0%	4.1%	1.5%	0.2%	0.1%	0.9%	0.0%	0.0%
1994	22,292.5	5.1%	10,517.2	3,610.4	12.6	2,050.5	2,411.0	2,497.6	609.5	323.6	52.4	19.2	188.5	0.0	0.0
			47.2%	16.2%	0.1%	9.2%	10.8%	11.2%	2.7%	1.5%	0.2%	0.1%	0.8%	0.0%	0.0%
1995	22,712.2	1.9%	10,204.0	3,736.1	18.0	2,226.3	2,479.5	2,694.5	741.5	335.6	51.5	19.2	195.8	0.0	0.0
			44.9%	16.4%	0.1%	9.8%	10.9%	11.9%	3.3%	1.5%	0.2%	0.1%	0.9%	0.0%	0.0%
1996	23,014.9	1.3%	10,134.5	3,793.1	24.1	2,315.7	2,628.7	2,774.8	722.1	342.4	49.2	33.7	196.6	0.0	0.0
			44.0%	16.5%	0.1%	10.1%	11.4%	12.1%	3.1%	1.5%	0.2%	0.1%	0.9%	0.0%	0.0%
1997	23,336.8	1.4%	10,269.2	3,887.4	49.8	2,065.2	2,735.8	2,899.0	796.1	350.1	47.6	34.1	202.5	0.0	0.0
			44.0%	16.7%	0.2%	8.8%	11.7%	12.4%	3.4%	1.5%	0.2%	0.1%	0.9%	0.0%	0.0%
1998	22,702.0	-2.7%	9,756.0	3,688.5	24.9	2,025.9	2,796.7	2,997.7	814.0	341.0	39.4	31.8	186.1	0.0	0.1
			43.0%	16.2%	0.1%	8.9%	12.3%	13.2%	3.6%	1.5%	0.2%	0.1%	0.8%	0.0%	0.0%
1999	22,857.0	0.7%	9,532.9	3,867.0	59.2	2,268.6	2,941.6	2,822.8	752.3	352.3	35.7	30.8	193.5	0.0	0.3
			41.7%	16.9%	0.3%	9.9%	12.9%	12.3%	3.3%	1.5%	0.2%	0.1%	0.8%	0.0%	0.0%
2000	23,600.2	3.3%	9,761.3	4,210.7	76.2	2,252.2	3,060.7	2,859.1	756.7	354.7	37.9	29.7	199.9	0.0	1.0
			41.4%	17.8%	0.3%	9.5%	13.0%	12.1%	3.2%	1.5%	0.2%	0.1%	0.8%	0.0%	0.0%
2001	22,855.4	-3.2%	9,177.8	4,329.3	50.7	2,063.8	3,075.0	2,823.7	726.2	359.0	35.0	30.3	182.4	0.0	2.2
			40.2%	18.9%	0.2%	9.0%	13.5%	12.4%	3.2%	1.6%	0.2%	0.1%	0.8%	0.0%	0.0%
2002	22,959.7	0.5%	9,258.7	4,439.9	70.1	2,168.8	3,119.0	2,577.3	703.5	364.4	34.8	29.5	190.0	0.0	3.6
			40.3%	19.3%	0.3%	9.4%	13.6%	11.2%	3.1%	1.6%	0.2%	0.1%	0.8%	0.0%	0.0%
2003	22,951.4	0.0%	9,297.1	4,574.2	73.3	2,149.7	3,315.1	2,093.9	807.2	379.5	29.9	30.4	194.1	0.0	7.2
			40.5%	19.9%	0.3%	9.4%	14.4%	9.1%	3.5%	1.7%	0.1%	0.1%	0.8%	0.0%	0.0%
2004	23,640.2	3.0%	9,227.6	4,965.1	93.3	2,151.2	3,291.9	2,470.7	803.9	375.3	27.3	29.5	193.0	0.0	11.4
			39.0%	21.0%	0.4%	9.1%	13.9%	10.5%	3.4%	1.6%	0.1%	0.1%	0.8%	0.0%	0.0%
2005	23,755.1	0.5%	9,506.1	4,747.7	81.3	2,127.6	3,288.5	2,661.7	667.9	373.5	26.7	28.2	230.8	0.0	15.3
			40.0%	20.0%	0.3%	9.0%	13.8%	11.2%	2.8%	1.6%	0.1%	0.1%	1.0%	0.0%	0.1%
2006	23,773.1	0.1%	9,111.0	4,806.4	58.7	2,065.0	3,600.6	2,645.6	763.1	417.7	25.9	26.9	233.3	0.0	18.9
			38.3%	20.2%	0.2%	8.7%	15.1%	11.1%	3.2%	1.8%	0.1%	0.1%	1.0%	0.0%	0.1%
2007	23,794.9	0.1%	9,255.8	5,010.1	64.2	1,940.2	3,892.4	2,306.1	646.9	361.6	24.6	26.6	243.6	0.0	22.9
			38.9%	21.1%	0.3%	8.2%	16.4%	9.7%	2.7%	1.5%	0.1%	0.1%	1.0%	0.0%	0.1%
2008	23,150.4	-2.7%	8,929.1	4,932.4	44.5	1,836.4	3,882.6	2,237.1	662.5	323.3	23.7	23.8	229.4	0.0	25.5
			38.6%	21.3%	0.2%	7.9%	16.8%	9.7%	2.9%	1.4%	0.1%	0.1%	1.0%	0.0%	0.1%
2009	21,686.4	-6.3%	8,065.9	4,391.3	12.6	1,764.9	3,781.3	2,398.1	659.2	326.2	21.4	24.7	209.8	0.0	31.0
			37.2%	20.2%	0.1%	8.1%	17.4%	11.1%	3.0%	1.5%	0.1%	0.1%	1.0%	0.0%	0.1%
2010	23,199.5	7.0%	8,162.0	4,967.5	29.9	1,926.1	4,001.7	2,464.8	703.0	520.9	20.2	22.6	346.9	0.0	33.9
			35.2%	21.4%	0.1%	8.3%	17.2%	10.6%	3.0%	2.2%	0.1%	0.1%	1.5%	0.0%	0.1%
2011	22,047.1	-5.0%	8,011.2	4,661.3	26.2	2,102.3	4,695.7	875.0	715.4	535.9	19.2	23.0	342.8	0.0	39.2
			36.3%	21.1%	0.1%	9.5%	21.3%	4.0%	3.2%	2.4%	0.1%	0.1%	1.6%	0.0%	0.2%
2012	21,720.5	-1.5%	8,049.3	4,873.8	29.2	2,199.8	4,890.7	137.1	649.1	467.3	18.4	22.4	342.7	0.0	40.6
			37.1%	22.4%	0.1%	10.1%	22.5%	0.6%	3.0%	2.2%	0.1%	0.1%	1.6%	0.0%	0.2%
2013	21,979.6	1.2%	8,028.9	5,249.5	64.2	2,016.4	4,953.5	80.0	671.3	452.4	26.8	22.3	370.5	0.0	43.7
			36.5%	23.9%	0.3%	9.2%	22.5%	0.4%	3.1%	2.1%	0.1%	0.1%	1.7%	0.0%	0.2%
2014	21,118.7	-3.9%	7,463.4	4,989.6	98.4	1,973.0	4,963.0	0.0	687.4	445.4	47.1	21.7	387.6	0.0	42.3
			35.3%	23.6%	0.5%	9.3%	23.5%	0.0%	3.3%	2.1%	0.2%	0.1%	1.8%	0.0%	0.2%
2015	20,934.2	-0.9%	7,435.5	5,075.1	80.4	1,922.8	4,662.0	78.7	710.2	444.1	70.9	21.5	389.9	0.0	43.0
			35.2%	24.0%	0.4%	9.1%	22.1%	0.4%	3.4%	2.1%	0.3%	0.1%	1.8%	0.0%	0.2%

Source: "Comprehensive Energy Statistics," Agency for Natural Resources and Energy

1.04 Trends in final domestic energy consumption

(Unit : 10¹⁵ J)

	Total	Comparison with the previous year (%)	Breakdown			
			Industry	Home	Business and others	Transportation
FY 1990	13,540.1	-	7,020.1	1,683.0	1,788.8	3,048.1
			51.8%	12.4%	13.2%	22.5%
1991	13,736.4	1.4%	6,962.8	1,721.9	1,820.6	3,231.0
			50.7%	12.5%	13.3%	23.5%
1992	13,856.6	0.9%	6,882.3	1,797.6	1,855.6	3,321.1
			49.7%	13.0%	13.4%	24.0%
1993	14,006.7	1.1%	6,771.7	1,890.5	1,972.5	3,371.9
			48.3%	13.5%	14.1%	24.1%
1994	14,505.0	3.4%	6,999.4	1,896.9	2,100.4	3,508.3
			48.3%	13.1%	14.5%	24.2%
1995	14,964.1	3.1%	7,105.1	2,004.8	2,216.8	3,637.5
			47.5%	13.4%	14.8%	24.3%
1996	15,203.3	1.6%	7,210.7	2,013.6	2,245.0	3,734.0
			47.4%	13.2%	14.8%	24.6%
1997	15,316.6	0.7%	7,199.9	2,007.4	2,352.8	3,756.5
			47.0%	13.1%	15.4%	24.5%
1998	15,113.5	-1.3%	6,777.1	2,024.7	2,582.9	3,728.8
			44.8%	13.4%	17.1%	24.7%
1999	15,488.0	2.4%	6,963.9	2,079.4	2,659.8	3,784.9
			45.0%	13.4%	17.2%	24.4%
2000	15,655.2	1.1%	7,037.6	2,142.4	2,706.4	3,768.8
			45.0%	13.7%	17.3%	24.1%
2001	15,455.1	-1.3%	6,822.8	2,084.7	2,718.6	3,829.1
			44.1%	13.5%	17.6%	24.8%
2002	15,680.5	1.4%	6,994.0	2,156.8	2,761.3	3,768.4
			44.6%	13.8%	17.6%	24.0%
2003	15,531.7	-1.0%	7,004.8	2,094.3	2,726.0	3,706.6
			45.1%	13.5%	17.6%	23.9%
2004	15,738.1	1.3%	7,077.5	2,119.6	2,919.5	3,621.5
			45.0%	13.5%	18.6%	23.0%
2005	15,670.5	-0.4%	6,962.3	2,204.9	2,967.3	3,536.0
			44.4%	14.1%	18.9%	22.6%
2006	15,713.8	0.3%	7,217.4	2,127.9	2,878.1	3,490.4
			45.9%	13.5%	18.3%	22.2%
2007	15,446.2	-1.7%	7,138.7	2,157.4	2,701.8	3,448.3
			46.2%	14.0%	17.5%	22.3%
2008	14,359.2	-7.6%	6,338.4	2,079.1	2,618.0	3,323.7
			44.1%	14.5%	18.2%	23.1%
2009	14,089.4	-1.9%	6,187.7	2,057.5	2,569.3	3,275.0
			43.9%	14.6%	18.2%	23.2%
2010	14,698.0	4.1%	6,682.4	2,173.9	2,556.4	3,285.3
			45.5%	14.8%	17.4%	22.4%
2011	14,300.1	-2.8%	6,526.7	2,082.4	2,451.0	3,240.0
			45.6%	14.6%	17.1%	22.7%
2012	14,115.4	-1.3%	6,376.5	2,065.1	2,362.2	3,311.6
			45.2%	14.6%	16.7%	23.5%
2013	14,009.1	-0.8%	6,230.9	2,012.2	2,531.0	3,235.0
			44.5%	14.4%	18.1%	23.1%
2014	13,744.3	-1.9%	6,172.8	1,936.7	2,506.5	3,128.4
			44.9%	14.1%	18.2%	22.8%
2015	13,548.4	-1.4%	6,138.6	1,873.4	2,459.6	3,076.8
			44.7%	13.6%	17.9%	22.4%

Source: "Comprehensive Energy Statistics," Agency for Natural Resources and Energy

1.05 Fuel consumption for residential and commercial industry use(Unit: 10¹⁵J)

Unit: 10³ t

	Total	Residential			Commercial industry (Tertiary Industry)				
		Oil products	Town gas	Electricity		Oil products	Town gas	Electricity	
FY 1990	3,472	1,683	613	343	663	1,789	1,000	79	525
1995	4,222	2,005	722	499	827	2,217	1,087	103	797
2000	4,848	2,142	755	419	928	2,706	1,186	177	1,047
2005	5,172	2,205	722	436	1,019	2,967	1,253	230	1,152
2010	4,730	2,174	626	427	1,099	2,556	832	278	1,278
2011	4,533	2,082	91	427	1,045	2,451	859	257	1,169
2012	4,432	2,065	586	426	1,034	2,367	679	294	1,203
2013	4,543	2,012	558	410	1,027	2,531	747	327	1,264
2014	4,355	1,937	517	417	986	2,418	735	369	1,225

Source: "JAPAN STATISTICAL YEARBOOK," Statistics Bureau, Ministry of Internal Affairs and Communication

(http://www.stat.go.jp/data/nenkan/66nenkan/11.htm)

1.06 Supply and demand of food (1)

	Domestic production (Thousand t)	Foreign trade		Changes in stock ¹⁾	Supplies for domestic consumption (Thousand t)	Net food supply per capita					Self-sufficiency ratio (%)
		Imports (Thousand t)	Exports (Thousand t)			Quantity Per year (kg)	Per day				
							Quantity (g)	Calories (kcal)	Protein (g)	Lipid (g)	
[Rice]											
FY2000	9,490	879	462	-76	9,790	64.6	177.0	630.0	10.8	1.6	95
2005	8,998	978	179	252	9,222	61.4	168.2	598.9	10.3	1.5	95
2010	8,554	831	201	-240	9,018	59.5	163.0	580.4	9.9	1.5	97
2011	8,566	997	171	-217	9,018	57.8	158.0	562.5	9.6	1.4	96
2012	8,692	848	132	358	8,667	56.3	154.1	548.7	9.4	1.4	96
2013	8,718	833	100	266	8,697	56.9	155.9	555.0	9.5	1.4	96
[Wheat]											
FY2000	688	5,688	0	65	6,311	32.6	89.2	328.3	9.8	1.9	11
2005	875	5,292	0	-46	6,213	31.7	86.9	319.9	9.6	1.8	14
2010	571	5,473	0	-340	6,384	32.7	89.5	329.5	9.8	1.9	9
2011	746	6,480	0	525	6,701	32.8	89.6	329.6	9.9	1.9	11
2012	858	6,578	0	269	7,167	32.9	90.3	332.2	9.9	1.9	12
2013	812	5,737	0	-443	6,992	32.7	89.6	329.8	9.9	1.9	12
[Barley]											
FY2000	192	2,438	0	24	2,606	0.3	0.8	2.8	0.1	0.0	7
2005	171	2,030	0	-64	2,265	0.2	0.6	1.9	0.0	0.0	8
2010	149	1,902	0	-36	2,087	0.2	0.5	1.6	0.0	0.0	7
2011	158	1,970	0	-14	2,142	0.3	0.7	2.4	0.0	0.0	7
2012	160	1,895	0	0	2,055	0.2	0.6	1.9	0.0	0.0	8
2013	168	1,880	0	-15	2,063	0.2	0.6	2.0	0.0	0.0	8
[Miscellaneous cereals]											
FY2000	30	18,634	0	328	18,336	1.0	2.8	10.3	0.3	0.1	0
2005	34	18,642	0	749	17,927	1.2	3.3	12.3	0.3	0.2	0
2010	31	17,831	0	598	17,264	1.0	2.8	10.4	0.3	0.1	0
2011	33	16,972	0	97	16,908	1.2	3.1	11.5	0.3	0.1	0
2012	46	16,597	0	331	16,312	1.2	3.2	11.6	0.3	0.1	0
2013	34	16,429	0	245	16,218	1.2	3.4	12.3	0.3	0.1	0
[Sweet potatoes]											
FY2000	1,073	11	0	0	1,084	4.9	13.4	17.7	0.2	0.0	99
2005	1,053	85	1	0	1,137	4.9	13.4	17.7	0.2	0.0	93
2010	864	65	2	0	927	3.8	10.4	13.8	0.1	0.0	93
2011	886	71	1	0	956	4.1	11.3	15.0	0.1	0.0	93
2012	876	72	2	0	946	4.1	11.2	14.8	0.1	0.0	93
2013	942	78	3	0	1,017	4.2	11.6	15.3	0.1	0.0	93
[Irish potatoes]											
FY2000	2,898	820	3	0	3,715	16.2	44.4	33.8	0.7	0.0	78
2005	2,752	807	1	0	3,558	14.8	40.6	30.9	0.7	0.0	77
2010	2,290	959	2	0	3,247	14.8	40.4	30.7	0.6	0.0	71
2011	2,387	1,009	2	0	3,394	15.9	43.4	33.0	0.7	0.0	70
2012	2,500	1,028	2	0	3,526	16.3	44.8	34.0	0.7	0.0	71
2013	2,408	970	3	0	3,375	15.4	42.3	32.1	0.7	0.0	71
[Pulses] ²⁾											
FY2000	366	5,165	0	106	5,425	9.0	24.8	105.0	7.5	4.9	7
2005	352	4,482	0	44	4,790	9.3	25.4	107.6	7.8	5.0	7
2010	317	3,748	0	30	4,035	8.4	23.1	98.4	7.1	4.7	8
2011	310	3,134	0	-137	3,581	8.3	22.6	96.2	7.0	4.6	9
2012	340	3,015	0	-64	3,419	8.1	22.3	94.3	6.8	4.4	10
2013	300	3,038	0	-46	3,384	8.2	22.4	94.7	6.9	4.4	9
[Vegetables] ³⁾											
FY2000	13,704	3,124	2	0	16,826	102.4	280.6	82.9	3.4	0.6	81
2005	12,492	3,367	10	0	15,849	96.3	263.8	77.6	3.3	0.5	79
2010	11,730	2,783	5	0	14,508	88.1	241.5	70.4	3.0	0.5	81
2011	11,821	3,094	5	0	14,910	90.9	248.3	72.3	3.0	0.5	79
2012	12,012	3,302	4	0	15,310	93.5	256.1	74.4	3.1	0.5	78
2013	11,781	3,189	8	0	14,962	91.7	251.1	72.4	3.0	0.5	79

1.06 Supply and demand of food (2)

	Domestic production (Thousand t)	Foreign trade		Changes in stock ¹⁾	Supplies for domestic consumption (Thousand t)	Net food supply per capita					Self- sufficiency ratio (%)
		Imports (Thousand t)	Exports (Thousand t)			Quantity Per year (kg)	Per day				
							Quantity (g)	Calories (kcal)	Protein (g)	Lipid (g)	
[Fruits] ⁴⁾											
FY2000	3,847	4,843	68	-69	8,691	41.5	113.8	66.0	0.9	0.7	44
2005	3,703	5,437	64	40	9,036	43.1	118.0	70.2	0.9	1.0	41
2010	2,960	4,756	42	-45	7,719	36.6	100.2	62.6	0.8	1.0	38
2011	2,954	4,960	34	43	7,837	37.1	101.4	62.9	0.8	1.0	38
2012	3,062	5,007	26	27	8,016	38.3	104.8	66.0	0.9	1.1	38
2013	3,035	4,711	38	26	7,682	36.8	100.8	63.7	0.9	1.1	40
[Meat]											
FY2000	2,982	2,755	3	51	5,683	28.8	78.8	171.1	14.4	11.7	52
2005	3,045	2,703	2	97	5,649	28.5	78.0	166.7	14.3	11.3	54
2010	3,215	2,588	13	21	5,796	29.1	79.6	169.8	14.6	11.5	56
2011	3,168	2,735	6	41	5,856	29.6	80.8	172.5	14.8	11.7	54
2012	3,273	2,636	9	-24	5,924	30.0	82.2	174.5	15.1	11.8	55
2013	3,284	2,635	12	-16	5,923	30.1	82.3	174.9	15.1	11.8	55
[Beef]											
FY2000	521	1,055	0	22	1,554	7.6	20.7	57.3	3.5	4.5	34
2005	497	654	0	0	1,151	5.6	15.2	42.8	2.6	3.4	43
2010	512	731	1	24	1,218	5.9	16.1	45.4	2.7	3.6	42
2011	505	737	1	-9	1,250	6.0	16.5	46.5	2.8	3.7	40
2012	514	722	1	8	1,227	5.9	16.3	45.8	2.7	3.6	42
2013	506	765	1	31	1,239	6.0	16.5	46.4	2.8	3.7	41
[Pork]											
FY2000	1,256	952	0	20	2,188	10.6	29.2	66.6	5.3	4.7	57
2005	1,242	1,298	0	46	2,494	12.1	33.0	75.4	6.0	5.3	50
2010	1,277	1,143	1	3	2,416	11.7	31.9	72.9	5.8	5.1	53
2011	1,277	1,198	1	13	2,461	11.9	32.5	74.2	5.9	5.2	52
2012	1,295	1,141	1	-12	2,447	11.8	32.5	74.1	5.9	5.2	53
2013	1,310	1,113	2	-18	2,439	11.8	32.4	74.0	5.9	5.2	54
[Chicken]											
FY2000	1,195	686	3	13	1,865	10.2	28.0	45.6	5.4	2.4	64
2005	1,293	679	2	51	1,919	10.5	28.6	46.6	5.5	2.5	67
2010	1,417	674	11	-7	2,087	11.3	31.1	50.5	6.0	2.7	68
2011	1,378	763	4	38	2,099	11.4	31.2	50.8	6.0	2.7	66
2012	1,457	736	7	-18	2,204	12.0	33.0	53.6	6.4	2.9	66
2013	1,459	717	9	-28	2,195	12.0	32.9	53.5	6.3	2.9	66
[Hen eggs]											
FY2000	2,535	121	0	0	2,656	17.0	46.5	70.2	5.7	4.8	95
2005	2,469	151	1	0	2,619	16.6	45.5	68.6	5.6	4.7	94
2010	2,506	114	1	0	2,619	16.5	45.3	68.5	5.6	4.7	96
2011	2,495	138	0	0	2,633	16.7	45.6	68.8	5.6	4.7	95
2012	2,502	123	1	0	2,624	16.7	45.6	68.9	5.6	4.7	95
2013	2,519	124	1	0	2,642	16.8	46.0	69.5	5.7	4.7	95
[Cow milk and milk products]											
FY2000	8,414	3,952	13	44	12,309	94.2	258.2	165.2	8.3	9.0	68
2005	8,293	3,836	8	-23	12,144	91.8	251.5	160.9	8.0	8.8	68
2010	7,631	3,528	24	-231	11,366	86.4	236.7	151.5	7.6	8.3	67
2011	7,534	4,025	8	-84	11,635	88.6	242.1	154.9	7.7	8.5	65
2012	7,608	4,194	9	72	11,721	89.5	245.2	156.9	7.8	8.6	65
2013	7,448	4,058	15	-144	11,635	89.0	243.8	156.0	7.8	8.5	64
[Fishes and shellfishes] ⁴⁾											
FY2000	5,736	5,883	264	543	10,812	37.2	101.8	135.8	19.4	5.5	53
2005	5,152	5,782	647	86	10,201	34.6	94.9	137.0	18.3	6.2	51
2010	4,782	4,841	706	216	8,701	29.4	80.6	110.3	15.9	4.5	55
2011	4,328	4,482	530	32	8,248	28.5	77.9	107.3	15.4	4.4	52
2012	4,325	4,586	540	74	8,297	28.9	79.1	105.6	15.7	4.1	52
2013	4,289	4,081	680	-178	7,868	27.4	75.2	99.8	14.9	3.8	55

1.06 Supply and demand of food (3)

	Domestic production (Thousand t)	Foreign trade		Changes in stock ¹⁾	Supplies for domestic consumption (Thousand t)	Net food supply per capita					Self- sufficiency ratio (%)
		Imports (Thousand t)	Exports (Thousand t)			Quantity Per year (kg)	Per day				
							Quantity (g)	Calories (kcal)	Protein (g)	Lipid (g)	
[Seaweeds] ^{4) 5)}											
FY2000	130	78	2	0	206	1.4	3.8	6.1	1.1	0.1	63
2005	123	70	3	0	190	1.2	3.4	5.4	1.0	0.1	65
2010	106	47	2	0	151	1.0	2.7	4.1	0.7	0.1	70
2011	88	55	2	0	141	0.9	2.5	3.7	0.6	0.1	62
2012	108	51	1	0	158	1.1	2.9	4.3	0.7	0.1	68
2013	101	48	2	0	147	1.0	2.6	3.9	0.7	0.1	69
[Sugar] ⁶⁾											
FY2000	2,413	500	3	3	2,907	20.2	55.4	212.3	0.0	0.0	29
2005	2,315	567	2	28	2,852	19.9	54.6	209.5	0.0	0.0	34
2010	2,152	538	7	-26	2,709	18.9	51.9	199.0	0.0	0.0	26
2011	2,147	581	2	43	2,683	18.8	51.6	197.8	0.0	0.0	26
2012	2,093	571	1	2	2,661	18.8	51.5	197.6	0.0	0.0	28
2013	2,126	574	1	2	2,697	19.0	52.1	199.8	0.0	0.0	29
[Fats and oils] ⁴⁾											
FY2000	2,200	725	18	11	2,896	15.1	41.5	382.9	0.0	41.5	14
2005	2,037	964	19	-13	2,995	14.6	39.9	368.3	0.0	39.9	13
2010	1,980	929	14	-25	2,920	13.5	36.9	340.5	0.0	36.9	13
2011	1,946	967	12	-4	2,905	13.5	37.0	341.3	0.0	37.0	13
2012	1,950	985	13	6	2,916	13.6	37.2	343.2	0.0	37.2	13
2013	1,946	966	16	-55	2,951	13.6	37.3	343.8	0.0	37.3	13
<Vegetable oils and fats>											
FY2000	1,862	579	17	10	2,414	13.7	37.5	345.5	0.0	37.5	3
2005	1,715	838	17	-13	2,549	13.5	36.9	339.7	0.0	36.9	2
2010	1,657	846	12	-22	2,513	12.7	34.7	319.8	0.0	34.7	2
2011	1,635	881	9	8	2,499	12.7	34.7	320.0	0.0	34.7	3
2012	1,640	886	11	7	2,508	12.8	34.9	321.8	0.0	34.9	3
2013	1,622	903	11	-35	2,549	12.8	35.0	322.1	0.0	35.0	3
<Animal oils and fats>											
FY2000	338	146	1	1	482	1.4	4.0	37.4	0.0	4.0	70
2005	322	126	2	0	446	1.1	3.0	28.6	0.0	3.0	72
2010	323	83	2	-3	407	0.8	2.2	20.7	0.0	2.2	79
2011	311	86	3	-12	406	0.8	2.3	21.3	0.0	2.3	77
2012	310	99	2	-1	408	0.8	2.3	21.4	0.0	2.3	76
2013	324	63	3	-20	404	0.9	2.3	22.1	0.0	2.3	80
[Soy sauce]											
FY2000	1,061	0	11	1	1,049	8.2	22.6	16.0	1.7	0.0	-
2005	939	1	18	-1	923	7.2	19.7	14.0	1.5	0.0	-
2010	845	1	18	-1	829	6.5	17.7	12.6	1.4	0.0	-
2011	821	1	19	-1	804	6.3	17.1	12.2	1.3	0.0	-
2012	802	2	17	-1	788	6.2	16.9	12.0	1.3	0.0	-
2013	808	2	20	0	790	6.2	17.0	12.0	1.3	0.0	-

Notes:

1. Differences in stocks between the beginning and the end of the fiscal year.
2. For soy beans, calendar year is applied.
3. For imports and exports, calendar year is applied.
4. Calendar year.
5. Total of refined sugar, brown sugar and un-centrifugal sugar.

Source: "JAPAN STATISTICAL YEARBOOK," Statistic Bureau, Ministry of Internal Affairs and Communications

1.07 Energy consumption by manufacturing industry (by industry type)

(Unit : 10¹⁰ kcal)

	Manufacturing industry											
		Raw materials						Non-raw materials				
		Iron & Steel	Chemicals	Ceramics and cement	Paper and pulp			Foods and tobacco	Textile	Non-ferrous metals	Machinery	Others
FY 1965	62,737	48,636	19,210	16,484	7,737	5,205	14,103	2,974	2,767	1,860	2,383	4,119
1970	125,837	100,058	43,082	36,854	12,073	8,049	25,779	3,960	5,454	3,819	4,593	7,953
1975	138,083	105,899	49,698	35,346	12,192	8,663	32,185	4,640	6,494	3,889	3,818	13,344
1980	132,978	99,240	44,766	32,645	13,357	8,472	33,738	4,561	4,891	4,411	4,653	15,222
1985	125,058	90,704	39,431	32,335	10,947	7,991	34,355	4,212	4,105	3,137	7,244	15,657
1990	142,762	102,992	42,118	39,048	11,946	9,880	39,770	4,878	3,448	3,965	9,571	17,909
1991	144,298	104,122	40,937	41,380	12,304	9,501	40,176	4,910	3,287	4,148	9,522	18,309
1992	141,131	101,817	39,216	40,801	12,278	9,522	39,312	5,036	3,313	3,917	9,388	17,658
1993	141,315	101,573	38,948	40,789	12,300	9,536	39,742	4,985	3,328	3,967	9,274	18,188
1994	147,549	107,402	40,116	44,839	12,586	9,861	40,146	5,100	3,332	3,984	9,516	18,214
1995	150,864	109,687	40,441	46,172	12,645	10,429	41,179	5,341	3,383	3,772	9,666	19,017
1996	153,422	110,874	41,305	46,778	12,578	10,213	42,548	5,411	3,176	3,595	9,892	20,474
1997	155,591	113,578	42,723	48,041	12,395	10,419	42,013	5,424	3,061	3,551	10,247	19,730
1998	152,318	109,816	40,753	47,510	11,942	9,611	42,501	5,519	3,015	3,393	9,988	20,586
1999	160,005	114,902	41,698	51,473	11,641	10,090	45,101	5,536	3,150	3,519	10,164	22,732
2000	162,552	117,218	43,220	52,283	11,143	10,572	45,334	5,562	2,973	3,462	10,426	22,911
2001	151,599	107,670	39,469	48,805	10,618	8,778	43,929	5,382	2,736	3,190	8,961	23,660
2002	154,100	109,096	40,327	50,072	9,857	8,840	45,004	5,470	2,614	3,177	9,203	24,540
2003	155,756	110,287	40,477	51,415	9,629	8,766	45,469	5,494	2,561	3,095	9,330	24,989
2004	155,949	110,722	40,255	52,185	9,748	8,534	45,227	5,519	2,416	3,110	9,729	24,453
2005	157,575	112,287	40,327	53,797	9,607	8,556	45,288	5,506	2,280	3,222	10,282	23,998
2006	159,255	113,245	40,844	54,435	9,717	8,249	46,010	5,634	2,228	3,281	11,233	23,634
2007	158,751	113,505	41,871	54,107	9,622	7,905	45,246	5,668	1,816	3,449	11,319	22,994
2008	143,842	101,197	37,034	47,599	9,191	7,373	42,645	5,517	1,772	3,279	10,090	21,987
2009	140,431	100,293	35,133	48,624	8,505	8,031	40,138	5,465	1,910	2,975	9,324	20,464
2010	149,157	106,966	39,717	49,873	8,711	8,665	42,191	5,715	2,189	3,051	10,132	21,104
2011	145,336	103,316	39,354	46,012	8,301	9,649	42,020	5,637	2,223	3,060	9,740	21,360
2012	142,860	101,671	38,726	45,154	8,107	9,684	41,189	5,589	2,224	2,930	9,451	20,995
2013	146,013	105,518	39,730	46,748	8,382	10,658	40,495	5,531	1,745	2,878	9,079	21,262
2014	143,220	103,585	39,578	45,234	8,134	10,639	39,635	5,422	1,772	2,938	8,995	20,508
2015	141,994	101,437	37,889	45,533	7,657	10,358	40,557	5,413	1,715	2,894	8,947	21,588

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.08 Energy intensity of manufacturing (IIP basis)

(FY 1973= 100)

		Manufacturing										
		Raw-materials					Non-raw materials					
			Iron & steel	Chemicals	Ceramics & cement	Paper and pulp		Foods and tobacco	Fiber	Non-ferrous metals	Machinery	Others
FY 1965	107.8	105.5	103.2	108.1	117.9	113.1	112.6	93.0	60.5	112.7	168.2	69.7
1970	103.8	103.8	101.4	109.7	102.7	100.1	97.4	92.1	91.2	113.2	121.0	76.8
1973	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1975	104.3	102.4	109.0	93.5	103.8	102.9	112.5	98.1	112.7	102.5	91.1	128.2
1980	74.2	74.2	81.1	64.2	88.9	80.4	83.9	85.7	83.0	89.6	68.5	124.8
1985	58.5	61.5	69.5	51.4	74.8	65.4	69.2	76.7	71.5	61.7	77.3	126.1
1990	52.9	55.5	66.2	46.0	68.7	60.8	63.0	83.4	66.1	59.4	74.9	119.9
1991	53.9	56.6	66.7	48.4	72.7	57.8	64.1	83.6	64.0	61.6	74.9	125.5
1992	56.0	57.3	69.0	48.0	77.0	59.5	67.7	85.1	69.4	59.6	81.2	126.2
1993	58.2	58.2	71.7	48.0	79.8	60.5	71.2	84.0	77.6	60.9	83.6	134.7
1994	58.9	58.7	70.9	49.5	79.6	60.4	70.1	85.4	80.6	59.2	82.1	136.8
1995	59.0	58.9	71.7	49.2	80.9	61.8	70.3	90.1	88.6	55.3	79.7	144.8
1996	58.1	58.6	73.0	48.9	79.1	59.9	69.8	90.4	85.1	50.3	77.4	151.8
1997	58.2	59.7	74.4	49.7	80.0	59.7	68.0	92.1	85.7	49.5	78.1	148.2
1998	61.2	62.0	81.1	51.3	86.6	57.1	73.5	95.2	95.2	51.8	81.7	164.4
1999	62.6	63.1	80.0	53.3	85.6	58.1	76.1	94.6	104.8	51.7	80.0	183.3
2000	61.0	62.8	76.4	53.3	82.3	60.0	72.9	95.2	108.2	47.6	76.1	187.8
2001	62.7	60.2	74.1	51.1	84.8	51.7	79.3	93.4	110.5	45.6	75.3	210.5
2002	61.9	59.8	70.9	51.1	81.8	51.4	78.8	96.1	117.3	44.7	73.6	220.1
2003	60.8	59.3	68.8	51.1	80.5	51.1	77.1	95.7	125.4	42.4	71.1	224.6
2004	58.6	58.5	66.4	51.0	81.8	49.1	73.3	95.4	127.8	42.6	69.6	218.7
2005	58.3	59.9	67.3	53.5	80.1	48.7	71.7	97.3	130.8	43.3	70.9	213.4
2006	56.3	58.5	65.4	52.0	80.3	47.0	69.3	101.2	133.5	42.9	72.7	203.1
2007	54.7	58.2	65.6	51.7	79.9	44.6	66.0	99.9	115.7	44.6	70.3	196.7
2008	56.7	57.4	68.7	49.2	87.9	44.5	71.9	99.1	130.1	50.6	73.9	208.2
2009	61.2	58.8	74.2	49.5	89.7	51.6	76.5	100.0	167.3	48.9	79.1	206.4
2010	59.7	59.1	71.5	49.5	82.4	54.5	73.1	107.3	179.8	47.0	76.1	204.3
2011	58.5	58.4	72.9	46.4	82.3	62.0	72.9	106.8	180.7	47.9	73.0	209.2
2012	59.3	58.2	72.6	46.3	79.4	63.9	74.0	106.6	186.8	46.2	74.0	207.9
2013	58.7	58.9	72.5	47.1	78.4	67.7	70.3	103.1	147.3	45.1	68.3	206.4
2014	57.9	59.1	73.1	47.1	75.9	68.7	68.8	104.6	152.8	45.8	67.0	204.7
2015	58.0	58.0	74.1	46.3	74.1	66.4	71.4	102.3	150.0	45.7	67.8	218.4

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.09 Residential energy consumption by use

	Energy consumption by use (10 ¹⁰ kcal)						Growth rates (%)					
	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total
FY 1965	55	3,279	3,619	1,709	2,034	10,696	-	-	-	-	-	8.8
1970	163	7,004	4,868	2,466	3,828	18,329	24.8	15.9	5.4	0.3	15.3	10.6
1975	285	7,529	7,987	3,523	6,252	25,575	18.0	2.8	2.4	3.5	11.3	4.9
1980	223	8,234	10,280	3,550	7,833	30,120	-42.1	-8.0	-3.4	-7.1	0.8	-4.6
1985	643	10,547	12,402	3,713	9,578	36,883	25.4	12.7	-0.9	3.6	3.5	4.7
1990	950	10,439	14,677	3,806	12,508	42,380	50.8	-0.8	-0.2	-1.6	5.8	2.0
1991	748	10,546	14,948	3,752	13,333	43,327	-21.3	1.0	1.9	-1.4	6.6	2.2
1992	836	11,150	15,978	3,776	13,633	45,373	11.8	5.7	6.9	0.6	2.3	4.7
1993	523	12,012	17,033	3,794	13,947	47,310	-37.4	7.7	6.6	0.5	2.3	4.3
1994	1,475	12,157	15,276	3,967	14,491	47,366	181.9	1.2	-10.3	4.6	3.9	0.1
1995	1,199	13,509	16,466	4,047	15,352	50,573	-18.7	11.1	7.8	2.0	5.9	6.8
1996	969	12,661	16,929	3,878	16,092	50,529	-19.2	-6.3	2.8	-4.2	4.8	-0.1
1997	1,058	11,778	17,338	3,972	16,290	50,437	9.3	-7.0	2.4	2.4	1.2	-0.2
1998	1,231	12,572	14,825	4,107	16,740	49,474	16.3	6.7	-14.5	3.4	2.8	-1.9
1999	1,329	13,581	14,714	4,203	17,054	50,881	8.0	8.0	-0.7	2.4	1.9	2.8
2000	1,391	13,928	15,688	4,283	17,398	52,688	4.7	2.6	6.6	1.9	2.0	3.6
2001	1,237	12,721	15,979	4,081	17,594	51,611	-11.1	-8.7	1.9	-4.7	1.1	-2.0
2002	1,289	14,350	15,976	4,142	18,047	53,804	4.2	12.8	0.0	1.5	2.6	4.2
2003	957	12,670	16,266	4,231	17,911	52,035	-25.8	-11.7	1.8	2.1	-0.8	-3.3
2004	1,461	13,639	15,924	4,285	18,100	53,409	52.6	7.6	-2.1	1.3	1.1	2.6
2005	1,349	15,038	16,509	4,227	18,512	55,635	-7.6	10.3	3.7	-1.4	2.3	4.2
2006	1,206	12,805	16,677	4,280	18,703	53,672	-10.6	-14.8	1.0	1.3	1.0	-3.5
2007	1,405	13,586	16,275	4,249	18,891	54,407	16.5	6.1	-2.4	-0.7	1.0	1.4
2008	1,134	12,756	15,150	4,267	18,801	52,108	-19.3	-6.1	-6.9	0.4	-0.5	-4.2
2009	920	12,842	14,779	4,235	18,894	51,670	-18.9	0.7	-2.4	-0.7	0.5	-0.8
2010	1,582	14,563	15,140	4,266	19,113	54,664	71.8	13.4	2.4	0.7	1.2	5.8
2011	1,184	14,013	14,868	4,320	18,358	52,743	-25.1	-3.8	-1.8	1.3	-3.9	-3.5
2012	1,136	13,694	14,402	4,320	18,288	51,841	-4.1	-2.3	-3.1	0.0	-0.4	-1.7
2013	1,233	12,996	13,717	4,387	18,203	50,537	8.6	-5.1	-4.8	1.6	-0.5	-2.5
2014	1,054	12,584	13,611	4,400	17,138	48,787	-14.5	-3.2	-0.8	0.3	-5.9	-3.5
2015	973	11,687	13,378	4,232	16,829	47,098	-7.8	-7.1	-1.7	-3.8	-1.8	-3.5

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.10 Residential energy consumption by energy

	Energy consumption by energy (10 ¹⁰ kcal)							Growth rates						
	Coal, etc.	Kerosene	LPG	City gas	Electricity	Solar heat	Total	Coal, etc.	Kerosene	LPG	City gas	Electricity	Solar heat	Total
FY 1965	3,776	1,614	1,288	1,580	2,438	-	10,696	-1.1	19.8	13.8	16.4	12.0	-	8.8
1970	2,404	5,717	2,686	2,943	4,579	-	18,329	-13.2	22.8	4.5	12.7	15.5	-	10.6
1975	861	7,568	4,658	4,544	7,808	136	25,575	-38.6	3.5	9.3	4.7	10.6	-	4.9
1980	529	8,565	5,065	5,649	9,947	365	30,120	-10.5	-12.3	-10.0	3.7	0.2	71.4	-4.6
1985	357	10,959	5,719	6,743	12,263	842	36,883	-12.7	8.7	2.0	3.0	3.9	8.4	4.7
1990	222	10,925	6,526	7,764	15,819	1,124	42,380	-10.1	-2.7	-1.1	-0.4	7.8	13.3	2.0
1991	208	10,837	6,558	8,163	16,481	1,080	43,327	-6.3	-0.8	0.5	5.1	4.2	-3.9	2.2
1992	199	11,844	6,757	8,492	17,045	1,036	45,373	-4.3	9.3	3.0	4.0	3.4	-4.1	4.7
1993	192	12,797	6,808	8,987	17,515	1,011	47,310	-3.5	8.0	0.8	5.8	2.8	-2.4	4.3
1994	175	12,033	6,838	8,398	18,930	992	47,366	-8.9	-6.0	0.4	-6.6	8.1	-1.9	0.1
1995	157	13,311	7,386	9,035	19,714	970	50,573	-10.3	10.6	8.0	7.6	4.1	-2.2	6.8
1996	144	12,803	7,504	9,170	19,976	932	50,529	-8.3	-3.8	1.6	1.5	1.3	-3.9	-0.1
1997	128	12,771	7,271	9,058	20,277	932	50,437	-11.1	-0.2	-3.1	-1.2	1.5	0.0	-0.2
1998	120	12,528	6,005	9,031	20,965	825	49,474	-6.3	-1.9	-17.4	-0.3	3.4	-11.5	-1.9
1999	123	13,333	5,826	9,278	21,570	750	50,881	2.2	6.4	-3.0	2.7	2.9	-9.1	2.8
2000	107	13,897	6,307	9,491	22,100	786	52,688	-12.7	4.2	8.2	2.3	2.5	4.7	3.6
2001	101	12,926	6,454	9,355	22,049	726	51,611	-5.6	-7.0	2.3	-1.4	-0.2	-7.6	-2.0
2002	95	13,758	6,819	9,673	22,793	666	53,804	-5.9	6.4	5.7	3.4	3.4	-8.3	4.2
2003	90	12,501	6,685	9,706	22,435	618	52,035	-5.3	-9.1	-2.0	0.3	-1.6	-7.2	-3.3
2004	80	13,110	6,689	9,463	23,488	579	53,409	-11.1	4.9	0.1	-2.5	4.7	-6.3	2.6
2005	76	13,867	6,915	9,928	24,301	548	55,635	-5.0	5.8	3.4	4.9	3.5	-5.4	4.2
2006	74	12,339	6,948	9,765	24,026	520	53,672	-2.6	-11.0	0.5	-1.6	-1.1	-5.1	-3.5
2007	73	12,033	6,944	9,873	24,992	492	54,407	-1.4	-2.5	-0.1	1.1	4.0	-5.4	1.4
2008	72	11,029	6,303	9,646	24,590	468	52,108	-1.4	-8.3	-9.2	-2.3	-1.6	-4.9	-4.2
2009	66	10,904	6,070	9,629	24,573	428	51,670	-8.3	-1.1	-3.7	-0.2	-0.1	-8.5	-0.8
2010	68	11,895	6,273	9,789	26,244	395	54,664	3.0	9.1	3.3	1.7	6.8	-7.7	5.8
2011	66	11,486	6,069	9,791	24,970	361	52,743	-2.9	-3.4	-3.3	0.0	-4.9	-8.6	-3.5
2012	59	11,127	5,764	9,799	24,764	328	51,841	-10.6	-3.1	-5.0	0.1	-0.8	-9.1	-3.5
2013	60	10,475	5,511	9,554	24,640	297	50,537	1.7	-5.9	-4.4	-2.5	-0.5	-9.5	-2.5
2014	60	9,816	5,375	9,582	23,684	270	48,787	0.0	-6.3	-2.5	0.3	-3.9	-9.1	-3.5
2015	59	9,193	5,127	9,242	23,230	247	47,098	-1.7	-6.3	-4.6	-3.5	-1.9	-8.5	-3.5

Note:

"Coal, etc." is a total of coal, briquettes, firewood, charcoal and others.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.11 Residential energy consumption per household by use

	Consumption per household (Thousand kcal / household)						Growth rates					
	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total
FY 1965	22	1,330	1,468	693	825	4,338	-	-	-	-	-	-
1970	56	2,403	1,670	846	1,313	6,289	20.7	12.1	2.0	-2.9	11.6	7.0
1975	85	2,260	2,398	1,058	1,877	7,678	15.6	0.7	0.3	1.4	9.0	2.8
1980	62	2,298	2,869	991	2,186	8,406	-42.9	-9.2	-4.7	-8.3	-0.5	-5.9
1985	167	2,743	3,225	966	2,491	9,591	23.7	11.2	-2.3	2.2	2.1	3.3
1990	231	2,537	3,566	925	3,039	10,297	48.6	-2.2	-1.6	-3.0	4.3	0.6
1991	179	2,523	3,576	898	3,190	10,366	-22.5	-0.5	0.3	-2.9	5.0	0.7
1992	197	2,626	3,763	889	3,211	10,686	10.1	4.1	5.2	-0.9	0.7	3.1
1993	121	2,789	3,954	881	3,238	10,983	-38.3	6.2	5.1	-1.0	0.8	2.8
1994	338	2,784	3,498	909	3,319	10,847	178.1	-0.2	-11.5	3.2	2.5	-1.2
1995	271	3,054	3,722	915	3,470	11,433	-19.8	9.7	6.4	0.7	4.6	5.4
1996	216	2,824	3,776	865	3,590	11,271	-20.3	-7.5	1.4	-5.4	3.4	-1.4
1997	233	2,589	3,811	873	3,580	11,085	7.7	-8.3	0.9	0.9	-0.3	-1.6
1998	267	2,724	3,212	890	3,627	10,719	14.6	5.2	-15.7	1.9	1.3	-3.3
1999	284	2,901	3,143	898	3,643	10,869	6.5	6.5	-2.1	0.9	0.4	1.4
2000	293	2,937	3,308	903	3,669	11,111	3.4	1.2	5.3	0.6	0.7	2.2
2001	258	2,649	3,328	850	3,664	10,749	-12.2	-9.8	0.6	-5.9	-0.1	-3.3
2002	265	2,950	3,285	852	3,710	11,062	2.9	11.4	-1.3	0.2	1.3	2.9
2003	194	2,572	3,302	859	3,636	10,563	-26.7	-12.8	0.5	0.9	-2.0	-4.5
2004	293	2,737	3,195	860	3,632	10,717	50.9	6.4	-3.2	0.1	-0.1	1.5
2005	268	2,985	3,277	839	3,674	11,043	-8.6	9.1	2.6	-2.4	1.2	3.0
2006	236	2,506	3,264	838	3,660	10,503	-11.8	-16.0	-0.4	-0.2	-0.4	-4.9
2007	272	2,627	3,147	822	3,653	10,521	15.1	4.8	-3.6	-1.9	-0.2	0.2
2008	217	2,438	2,895	815	3,593	9,959	-20.2	-7.2	-8.0	-0.8	-1.6	-5.3
2009	174	2,429	2,795	801	3,573	9,772	-19.7	-0.4	-3.5	-1.8	-0.6	-1.9
2010	296	2,729	2,837	799	3,582	10,244	70.3	12.4	1.5	-0.2	0.2	4.8
2011	220	2,605	2,764	803	3,413	9,807	-25.7	-4.5	-2.6	0.5	-4.7	-4.3
2012	210	2,528	2,659	797	3,376	9,570	-4.8	-3.0	-3.8	-0.7	-1.1	-2.4
2013	222	2,338	2,468	789	3,275	9,093	5.8	-7.5	-7.2	-1.0	-3.0	-5.0
2014	188	2,249	2,433	786	3,063	8,719	-15.1	-3.8	-1.4	-0.4	-6.5	-4.1
2015	172	2,072	2,371	750	2,983	8,349	-8.5	-7.9	-2.5	-4.6	-2.6	-4.2

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.12 Residential energy consumption per household (by use and by energy)

(FY1970)

(Thousand kcal / household, %)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	83	56	46	72	1,313	1,571	(25.0)
City gas	186	-	649	174	-	1,010	(16.1)
LPG	31	-	380	511	-	922	(14.7)
Kerosene	1,672	-	278	11	-	1,962	(31.2)
Coal, etc.	430	-	318	77	-	825	(13.1)
Solar heat	-	-	-	-	-	-	-
Total	2,403	56	1,670	846	1,313	6,289	(100.0)
Shares	(38.2)	(0.9)	(26.6)	(13.5)	(20.9)	(100.0)	

(FY1980)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	83	62	352	93	2,186	2,776	(33.0)
City gas	282	-	1,026	269	-	1,577	(18.8)
LPG	66	-	760	587	-	1,414	(16.8)
Kerosene	1,812	-	556	23	-	2,390	(28.4)
Coal, etc.	55	-	73	19	-	148	(1.8)
Solar heat	-	-	102	-	-	102	(1.2)
Total	2,298	62	2,869	991	2,186	8,406	(100.0)
Shares	(27.3)	(0.7)	(34.1)	(11.8)	(26.0)	(100.0)	

(FY1990)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	182	231	264	128	3,039	3,844	(37.3)
City gas	365	-	1,187	335	-	1,886	(18.3)
LPG	92	-	1,062	431	-	1,586	(15.4)
Kerosene	1,886	-	746	23	-	2,655	(25.8)
Coal, etc.	11	-	34	9	-	54	(0.5)
Solar heat	-	-	273	-	-	273	(2.7)
Total	2,537	231	3,566	925	3,039	10,297	(100.0)
Shares	(24.6)	(2.2)	(34.6)	(9.0)	(29.5)	(100.0)	

(FY2000)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	297	293	243	158	3,669	4,661	(41.9)
City gas	445	-	1,217	340	-	2,002	(18.0)
LPG	84	-	852	394	-	1,330	(12.0)
Kerosene	2,109	-	814	8	-	2,931	(26.4)
Coal, etc.	2	-	17	3	-	23	(0.2)
Solar heat	-	-	166	-	-	166	(1.5)
Total	2,937	293	3,308	903	3,669	11,111	(100.0)
Shares	(26.4)	(2.6)	(29.8)	(8.1)	(33.0)	(100.0)	

(FY2010)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	443	296	386	211	3,582	4,918	(48.0)
City gas	434	-	1,112	289	-	1,834	(17.9)
LPG	109	-	768	298	-	1,176	(11.5)
Kerosene	1,744	-	486	-	-	2,229	(21.8)
Coal, etc.	-	-	11	2	-	13	(0.1)
Solar heat	-	-	74	-	-	74	(0.7)
Total	2,729	296	2,837	799	3,582	10,244	(100.0)
Shares	(26.6)	(2.9)	(27.7)	(7.8)	(35.0)	(100.0)	

(FY2015)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electric power	354	172	382	226	2,983	4,118	(49.3)
City gas	384	-	989	265	-	1,638	(19.6)
LPG	75	-	575	258	-	909	(10.9)
Kerosene	1,258	-	372	-	-	1,630	(19.5)
Coal, etc.	-	-	9	1	-	10	(0.1)
Solar heat	-	-	44	-	-	44	(0.5)
Total	2,072	172	2,371	750	2,983	8,349	(100.0)
Shares	(24.8)	(2.1)	(28.4)	(9.0)	(35.7)	(100.0)	

Note:

"Coal etc." is a total of coal, briquettes, firewood, charcoal and others.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.13 Penetration and ownership of home appliances

		Penetration Rates (%), Ownership Rates (=units /100 households)																	
Use		Appliances		FY1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Penetration Rates	Air conditioner	Oil stove		45.8	82.0	89.5	91.3	84.0	75.3	72.3	72.1	68.9	67.7	66.1	65.7	61.2	60.4	60.4	58.9
		Heater		-	-	-	18.4	42.3	61.2	63.6	63.4	65.2	66.3	67.0	67.9	67.8	68.3	69.4	69.5
		Electric carpet		-	-	-	-	-	50.2	54.4	58.2	61.5	63.1	65.3	66.1	66.3	68.7	67.9	68.3
		Air conditioner		2.0	7.7	19.5	41.2	54.6	68.1	69.8	72.3	74.2	77.2	77.2	79.3	81.9	84.4	86.2	86.2
	Cooling	Cooling		-	-	-	-	43.8	46.3	44.7	44.6	44.4	43.7	41.3	40.1	39.7	38.1	35.3	33.6
		Cooling and heating		-	-	-	-	20.0	38.0	40.0	47.2	48.5	53.4	56.7	60.2	64.9	67.0	71.7	72.9
	Water heating	Gas water boiler		-	46.0	69.1	77.3	69.3	62.1	62.9	58.4	60.1	58.3	55.0	54.9	52.3	52.0	51.2	49.0
		Water heater		-	-	-	-	24.8	37.0	30.0	31.1	30.4	30.4	30.3	30.8	31.7	32.5	33.4	33.0
	Cooking	Microwave oven		-	3.0	20.8	37.4	45.3	75.6	79.2	81.3	84.3	87.2	88.4	90.8	91.7	93.3	94.0	95.3
		Refrigerator		61.6	91.2	96.1	99.2	98.4	98.9	98.1	98.0	97.9	97.8	98.4	98.7	98.1	98.4	98.0	98.4
		(Over 300L) (Others)		-	-	-	-	-	-	54.7	58.4	60.8	61.5	62.6	65.5	67.3	68.6	70.2	72.5
	Others	Washing machine		75.5	93.6	98.1	99.2	99.6	99.4	99.2	99.3	99.3	99.0	99.2	99.6	99.3	99.0	99.3	99.3
		(Automatic) (Others)		-	-	-	-	33.9	42.7	45.8	49.3	53.4	58.0	61.9	67.3	72.4	75.3	78.6	82.0
		Clothes dryer		-	-	-	-	68.0	61.1	57.8	54.6	50.5	46.5	42.6	38.4	31.7	29.1	26.3	22.6
		(Washing machine integrated) (Others)		-	-	-	-	-	9.7	15.8	16.6	18.1	20.1	19.4	19.8	20.8	20.9	20.8	21.7
		Blanket dryer		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Color TV set		0.3	42.3	93.7	98.5	98.9	99.3	99.0	99.1	99.0	98.9	99.1	99.2	99.2	98.9	99.0	99.2
		(Over 29 inches) (Others)		-	-	-	-	-	-	30.5	33.6	38.0	37.9	39.2	43.1	45.7	48.0	49.0	50.9
		VTR		-	-	-	5.1	33.5	71.5	63.8	75.1	72.5	73.7	73.8	75.7	76.8	77.8	78.4	79.3
		Stereo set		16.7	33.9	53.8	58.5	60.5	57.9	61.0	61.3	60.1	57.7	58.2	56.3	55.2	54.6	55.5	52.9
		CD player		-	-	-	-	-	41.0	47.5	54.3	53.8	55.9	56.8	57.9	59.9	60.1	61.8	62.1
		Vacuum cleaner		41.2	74.3	92.7	95.4	98.2	98.7	98.1	98.4	98.3	98.3	98.2	98.1	98.3	98.6	98.2	98.3
		Personal Computer		-	-	-	-	-	11.5	12.2	11.9	13.9	15.6	17.3	22.1	25.2	29.5	38.6	50.1
Ownership rates	Oil stove		-	109.2	157.1	174.9	161.0	145.6	134.9	133.1	123.5	121.4	118.2	117.7	107.4	105.8	105.0	101.0	
	Fan heater		-	-	-	-	40.5	74.7	81.2	86.2	91.1	94.1	99.0	103.1	103.6	105.3	107.9	111.2	
	Air conditioner		-	8.8	24.8	57.9	88.0	126.5	131.2	147.5	151.6	160.3	166.1	179.3	191.7	200.7	207.6	217.4	
	Refrigerator		-	94.4	108.9	115.2	114.3	119.4	117.2	119.0	119.6	121.0	119.4	120.5	120.7	120.7	121.6	121.4	
	Color TV set		-	43.5	117.2	150.9	174.7	201.3	203.6	208.8	213.5	212.7	215.1	219.8	224.6	224.0	226.2	230.6	
	(Cathode Ray Tube) (Thin type)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Optical disk player & recorder		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Personal Computer		-	-	-	-	-	-	12.7	13.2	13.6	15.8	17.8	20.2	25.7	30.0	36.7	48.6	
	Wash toilet		-	-	-	-	-	-	-	16.0	19.9	24.2	27.6	30.8	35.7	41.0	44.2	49.2	
	Wash toilet		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53.0	
Use		Appliances		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Penetration Rates	Air conditioner	Oil stove		57.7	56.7	54.1	-	-	-	-	-	-	-	-	-	-	-	-	
		Heater		71.8	72.5	72.8	-	-	-	-	-	-	-	-	-	-	-	-	
		Electric carpet		68.6	67.1	65.2	-	-	-	-	-	-	-	-	-	-	-	-	
		Air conditioner		87.2	88.8	87.1	87.0	88.2	88.6	89.0	87.9	89.0	89.2	90.0	90.5	90.6	91.2	92.5	
	Cooling	Cooling		32.7	30.1	25.9	-	-	-	-	-	-	-	-	-	-	-	-	
		Cooling and heating		74.5	78.1	78.8	-	-	-	-	-	-	-	-	-	-	-	-	
	Water heating	Gas water boiler		49.3	48.5	46.0	-	-	-	-	-	-	-	-	-	-	-	-	
		Water heater		36.0	35.3	35.3	50.7	50.9	49.0	52.3	52.7	54.9	55.8	58.0	57.1	56.5	58.9	62.2	
	Cooking	Microwave oven		95.7	95.8	96.5	-	-	-	-	-	-	-	-	-	-	-	-	
		Refrigerator		98.4	98.9	98.4	-	-	-	-	-	-	-	-	-	-	-	-	
		(Over 300L) (Others)		74.4	75.4	76.9	-	-	-	-	-	-	-	-	-	-	-	-	
	Others	Washing machine		99.3	99.6	99.0	-	-	-	-	-	-	-	-	-	-	-	-	-
		(Automatic) (Others)		83.8	85.6	86.6	-	-	-	-	-	-	-	-	-	-	-	-	-
		Clothes dryer		21.1	19.1	16.8	-	-	-	-	-	-	-	-	-	-	-	-	-
		(Washing machine integrated) (Others)		22.8	22.7	22.4	25.9	27.3	28.6	31.1	29.2	30.1	29.8	32.2	31.7	55.2	58.3	59.1	
		Blanket dryer		-	-	-	-	-	-	-	-	-	-	-	-	41.9	44.0	45.1	
		Color TV set		36.5	36.5	38.1	-	-	-	-	-	-	-	-	-	-	-	-	-
		(Over 29 inches) (Others)		99.3	99.4	99.0	99.3	99.4	99.5	99.7	99.4	99.5	99.6	99.4	99.3	96.5	97.5	98.1	
		VTR		51.3	53.1	54.0	-	-	-	-	-	-	-	-	-	-	-	-	-
		Stereo set		83.4	82.6	82.2	-	-	-	-	-	-	-	-	-	-	-	-	-
		CD player		79.6	81.4	82.6	-	-	-	-	-	-	-	-	-	-	-	-	-
		Vacuum cleaner		54.9	55.2	55.5	-	-	-	-	-	-	-	-	-	-	-	-	-
		Personal Computer		60.5	60.3	60.9	-	-	-	-	-	-	-	-	-	-	-	-	-
Personal Computer		98.2	98.1	98.1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Personal Computer		57.2	63.3	65.7	64.6	68.3	71.0	73.1	73.2	74.6	76.0	77.3	78.0	78.7	78.0	79.1	-		
Ownership rates	Oil stove		100.6	96.3	91.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Fan heater		115.1	119.8	120.5	134.7	131.9	130.0	122.1	121.3	125.9	116.4	126.1	114.9	108.3	106.9	106.5	-	
	Air conditioner		229.9	245.4	245.3	248.6	255.3	255.5	257.1	256.0	263.1	259.9	268.0	264.3	275.8	274.7	283.7	-	
	Refrigerator		124.8	126.3	125.6	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Color TV set		235.0	237.8	238.4	252.0	250.3	248.0	241.5	243.1	243.0	239.6	232.4	225.9	208.1	211.3	215.5	-	
	(Cathode Ray Tube) (Thin type)		-	-	-	237.8	226.4	210.5	182.9	164.6	134.5	75.9	34.6	25.7	-	-	-	-	
	Optical disk player & recorder		-	-	-	14.2	23.9	37.4	58.6	78.5	108.5	163.7	197.8	200.2	208.1	211.3	215.5	-	
	Personal Computer		21.9	28.4	39.6	70.1	90.8	97.5	108.5	113.3	119.9	133.1	140.4	144.1	121.5	128.5	133.3	-	
	Wash toilet		78.4	87.9	92.6	95.8	104.1	107.0	110.1	111.8	118.2	122.9	129.9	128.1	131.2	126.8	128.0	-	
	Wash toilet		59.1	66.9	69.7	78.2	82.1	86.7	91.7	93.5	96.7	95.9	100.1	102.9	105.9	108.4	115.3	-	

Notes:

- In FY1980 and onward, figures are as of the end of fiscal year, and before FY1975, they are as of the previous month to the end of fiscal year (Feb.).
- Water heaters include solar water heater since FY1990.
- Survey on TV sets with CRT was discontinued in FY 2012.

Source: "2017 EDMC HANDBOOK OF ENERGY & ECONOMIC STATISTICS IN JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.14 Commercial energy consumption by use

	Energy consumption by use (10 ¹⁰ kcal)						Growth rates (%)					
	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total
FY 1965	213	3,155	2,862	685	1,089	8,004	-	-	-	-	-	-
1970	568	6,948	5,722	847	2,249	16,335	19.1	14.0	11.4	3.6	16.6	13.0
1975	1,202	10,040	7,908	1,018	3,822	23,989	10.9	-6.6	1.8	7.4	13.7	0.4
1980	1,181	9,960	7,531	1,467	6,223	26,362	-16.8	-0.8	-6.7	3.1	4.9	-1.9
1985	1,760	9,321	7,356	1,850	8,625	28,913	-4.3	1.7	-1.6	3.4	8.8	2.5
1990	2,946	9,548	9,221	2,314	12,438	36,467	27.2	7.7	4.3	4.9	7.1	7.8
1991	2,950	10,171	10,466	2,461	13,328	39,376	0.1	6.5	13.5	6.3	7.2	8.0
1992	2,920	11,017	10,098	2,492	14,000	40,528	-1.0	8.3	-3.5	1.3	5.0	2.9
1993	2,617	10,668	9,013	2,693	14,564	39,556	-10.4	-3.2	-10.7	8.1	4.0	-2.4
1994	3,898	10,488	9,635	2,785	15,498	42,304	48.9	-1.7	6.9	3.4	6.4	6.9
1995	3,724	11,507	9,439	2,952	15,986	43,608	-4.4	9.7	-2.0	6.0	3.1	3.1
1996	3,604	10,581	9,417	3,141	16,939	43,682	-3.3	-8.0	-0.2	6.4	6.0	0.2
1997	4,043	10,237	9,695	3,181	17,457	44,613	12.2	-3.3	3.0	1.3	3.1	2.1
1998	4,296	10,669	9,713	3,135	18,231	46,045	6.3	4.2	0.2	-1.5	4.4	3.2
1999	4,893	10,463	9,144	3,268	18,641	46,410	13.9	-1.9	-5.9	4.3	2.2	0.8
2000	5,167	10,605	8,988	3,515	18,698	46,973	5.6	1.4	-1.7	7.5	0.3	1.2
2001	5,351	9,239	8,809	3,546	19,346	46,290	3.6	-12.9	-2.0	0.9	3.5	-1.5
2002	5,710	10,500	8,210	3,494	19,481	47,397	6.7	13.7	-6.8	-1.4	0.7	2.4
2003	4,363	9,923	9,049	3,933	20,170	47,438	-23.6	-5.5	10.2	12.5	3.5	0.1
2004	5,756	9,803	8,537	3,805	20,546	48,447	31.9	-1.2	-5.7	-3.3	1.9	2.1
2005	5,209	10,027	8,048	3,901	19,762	46,946	-9.5	2.3	-5.7	2.5	-3.8	-3.1
2006	5,049	8,164	7,999	3,895	20,014	45,122	-3.1	-18.6	-0.6	-0.1	1.3	-3.9
2007	5,063	7,610	6,861	3,805	20,530	43,869	0.3	-6.8	-14.2	-2.3	2.6	-2.8
2008	5,037	6,702	6,381	3,732	20,323	42,176	-0.5	-11.9	-7.0	-1.9	-1.0	-3.9
2009	4,575	6,977	6,191	3,817	19,943	41,504	-9.2	4.1	-3.0	2.3	-1.9	-1.6
2010	5,486	7,084	5,964	3,870	21,613	44,017	19.9	1.5	-3.7	1.4	8.4	6.1
2011	4,786	6,965	5,681	3,772	20,339	41,543	-12.8	-1.7	-4.7	-2.5	-5.9	-5.6
2012	4,780	6,947	5,605	3,811	20,530	41,673	-0.1	-0.3	-1.3	1.0	0.9	0.3
2013	4,857	6,461	5,339	3,829	20,500	40,985	1.6	-7.0	-4.7	0.5	-0.1	-1.7
2014	4,309	6,150	5,036	3,820	20,370	39,685	-11.3	-4.8	-5.7	-0.2	-0.6	-3.2
2015	4,108	6,063	4,935	3,832	20,287	39,225	-4.7	-1.4	-2.0	0.3	-0.4	-1.2

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.15 Commercial energy consumption by energy

	Energy consumption by energy (10 ¹⁰ kcal)						Growth rates (%)					
	Coal	Oil	Gas	Electricity	Heat	Total	Coal	Oil	Gas	Electricity	Heat	Total
FY 1965	1,163	4,320	1,209	1,312	-	8,004	-	-	-	-	-	-
1970	525	11,119	1,904	2,782	5	16,335	-18.7	14.9	8.7	17.1	25.0	13.0
1975	154	16,180	2,611	4,990	54	23,989	-32.8	-3.3	3.1	13.5	170.0	0.4
1980	736	14,884	3,224	7,411	107	26,362	-3.4	-4.1	2.9	0.5	12.6	-1.9
1985	1,014	13,458	3,904	10,357	180	28,913	-2.0	-0.1	3.3	6.3	5.9	2.5
1990	745	15,363	5,342	14,757	260	36,467	5.7	6.0	6.0	10.2	22.1	7.8
1991	658	17,118	5,754	15,534	312	39,376	-11.7	11.4	7.7	5.3	20.0	8.0
1992	644	17,523	5,981	16,053	327	40,528	-2.1	2.4	3.9	3.3	4.8	2.9
1993	736	15,543	6,368	16,559	350	39,556	14.3	-11.3	6.5	3.1	7.0	-2.4
1994	926	15,903	6,723	18,326	426	42,304	25.8	2.3	5.6	10.7	21.7	6.9
1995	1,089	16,053	7,131	18,835	500	43,608	17.6	0.9	6.1	2.8	17.4	3.1
1996	1,069	15,136	7,416	19,524	537	43,682	-1.8	-5.7	4.0	3.7	7.4	0.2
1997	976	15,055	7,695	20,307	580	44,613	-8.7	-0.5	3.8	4.0	8.0	2.1
1998	1,055	15,522	7,556	21,311	601	46,045	8.1	3.1	-1.8	4.9	3.6	3.2
1999	894	14,589	8,403	21,895	629	46,410	-15.3	-6.0	11.2	2.7	4.7	0.8
2000	943	14,000	8,848	22,524	658	46,973	5.5	-4.0	5.3	2.9	4.6	1.2
2001	978	12,572	8,975	23,104	661	46,290	3.7	-10.2	1.4	2.6	0.5	-1.5
2002	1,060	12,809	9,194	23,661	673	47,397	8.4	1.9	2.4	2.4	1.8	2.4
2003	1,030	12,835	9,442	23,463	668	47,438	-2.8	0.2	2.7	-0.8	-0.7	0.1
2004	1,006	12,185	9,769	24,775	712	48,447	-2.3	-5.1	3.5	5.6	6.6	2.1
2005	955	11,830	10,068	23,381	712	46,946	-5.1	-2.9	3.1	-5.6	0.0	-3.1
2006	1,041	10,188	9,932	23,276	685	45,122	9.0	-13.9	-1.4	-0.4	-3.8	-3.9
2007	806	8,642	9,941	23,775	705	43,869	-22.6	-15.2	0.1	2.1	2.9	-2.8
2008	665	7,422	9,770	23,651	668	42,176	-17.5	-14.1	-1.7	-0.5	-5.2	-3.9
2009	582	7,361	9,738	23,179	644	41,504	-12.5	-0.8	-0.3	-2.0	-3.6	-1.6
2010	615	7,143	10,082	25,507	670	44,017	5.7	-3.0	3.5	10.0	4.0	6.1
2011	580	6,954	9,746	23,649	614	41,543	-5.7	-2.6	-3.3	-7.3	-8.4	-5.6
2012	616	6,743	9,855	23,831	628	41,673	6.2	-3.0	1.1	0.8	2.3	0.3
2013	606	5,947	9,956	23,838	638	40,985	-1.6	-11.8	1.0	0.0	1.6	-1.7
2014	613	5,330	9,677	23,456	609	39,685	1.2	-10.4	-2.8	-1.6	-4.5	-3.2
2015	631	5,158	9,534	23,295	607	39,225	2.9	-3.2	-1.5	-0.7	-0.3	-1.2

Notes:

- "Gas" includes city gas and LP gas.
- "Thermal" includes geothermal and solar thermal.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.16 Commercial energy consumption by business type

	Energy consumption by business type (10 ¹⁰ kcal)									Total
	Office & Buildings	Department stores & Supermarkets	Wholesales & retails	Restaurants	Schools	Hotels & Inns	Hospitals	Theater & Amusement places	Others	
FY 1965	1,122	51	1,067	873	1,165	1,226	910	134	1,457	8,004
1970	2,700	120	2,317	1,759	2,376	3,048	2,203	328	1,486	16,335
1975	4,257	272	3,529	2,597	3,061	4,334	3,020	782	2,137	23,989
1980	4,514	341	4,276	2,798	3,206	3,773	2,998	722	3,734	26,362
1985	5,129	372	5,074	2,643	3,180	3,628	3,191	843	4,853	28,913
1990	6,911	493	6,455	3,239	3,564	4,778	4,222	1,022	5,785	36,467
1991	7,420	536	6,858	3,436	3,787	5,316	4,769	1,103	6,152	39,376
1992	7,718	552	7,261	3,465	3,831	5,391	4,788	1,189	6,332	40,528
1993	7,661	557	7,283	3,500	3,588	5,105	4,437	1,169	6,256	39,556
1994	8,301	639	7,727	3,642	3,700	5,467	4,738	1,267	6,823	42,304
1995	8,490	658	8,131	3,705	3,726	5,481	4,800	1,332	7,286	43,608
1996	8,494	672	8,174	3,799	3,626	5,474	4,803	1,328	7,312	43,682
1997	8,640	733	8,282	3,851	3,620	5,634	5,008	1,375	7,470	44,613
1998	8,791	758	8,723	3,872	3,650	5,715	5,261	1,428	7,847	46,045
1999	8,903	746	8,901	3,950	3,653	5,661	5,305	1,491	7,800	46,410
2000	8,931	764	9,120	4,060	3,633	5,626	5,393	1,496	7,951	46,973
2001	8,844	778	8,835	4,026	3,520	5,535	5,336	1,453	7,962	46,290
2002	8,923	786	9,297	4,016	3,585	5,451	5,480	1,557	8,302	47,397
2003	8,668	759	9,227	4,190	3,549	5,570	5,648	1,485	8,343	47,438
2004	9,100	805	9,432	4,157	3,585	5,538	5,745	1,577	8,509	48,447
2005	8,658	759	9,355	4,031	3,439	5,249	5,646	1,545	8,265	46,946
2006	8,553	738	8,663	3,903	3,309	5,118	5,433	1,433	7,973	45,122
2007	8,727	737	8,548	3,798	3,264	4,847	5,080	1,423	7,446	43,869
2008	8,652	715	8,169	3,662	3,152	4,654	4,818	1,363	6,991	42,176
2009	8,501	682	8,203	3,630	3,130	4,562	4,727	1,333	6,736	41,504
2010	9,291	733	8,775	3,760	3,385	4,703	4,911	1,468	6,992	44,017
2011	8,720	657	8,313	3,533	3,217	4,404	4,666	1,367	6,666	41,543
2012	8,820	641	8,312	3,499	3,292	4,330	4,648	1,369	6,763	41,673
2013	8,841	621	8,028	3,413	3,346	4,212	4,517	1,353	6,655	40,985
2014	8,657	586	7,779	3,303	3,317	4,009	4,313	1,304	6,417	39,685
2015	8,567	579	7,679	3,235	3,328	3,930	4,259	1,282	6,365	39,225

	Growth rates (%)									Total
	Office & Buildings	Department stores & Supermarkets	Wholesales & retails	Restaurants	Schools	Hotels & Inns	Hospitals	Theater & Amusement places	Others	
FY 1965	-	-	-	-	-	-	-	-	-	-
1970	16.2	19.3	14.9	12.5	12.1	13.3	14.0	16.9	4.0	13.0
1975	2.5	7.8	2.3	0.6	-6.2	0.6	-0.3	-0.4	2.7	0.4
1980	-2.7	-3.7	1.2	-0.9	0.6	-6.8	-3.4	-2.5	-0.7	-1.9
1985	3.8	2.1	4.7	-1.2	2.2	0.2	0.9	5.4	3.6	2.5
1990	8.9	8.3	9.5	6.3	5.8	7.2	7.7	8.9	6.8	7.8
1991	7.4	8.8	6.2	6.1	6.3	11.3	13.0	7.9	6.4	8.0
1992	4.0	3.0	5.9	0.9	1.2	1.4	0.4	7.8	2.9	2.9
1993	-0.7	0.9	0.3	1.0	-6.3	-5.3	-7.3	-1.7	-1.2	-2.4
1994	8.4	14.6	6.1	4.1	3.1	7.1	6.8	8.4	9.1	6.9
1995	2.3	2.9	5.2	1.7	0.7	0.3	1.3	5.1	6.8	3.1
1996	0.0	2.2	0.5	2.5	-2.7	-0.1	0.1	-0.3	0.4	0.2
1997	1.7	9.0	1.3	1.4	-0.2	2.9	4.3	3.5	2.2	2.1
1998	1.8	3.5	5.3	0.6	0.8	1.4	5.0	3.8	5.0	3.2
1999	1.3	-1.7	2.0	2.0	0.1	-0.9	0.8	4.5	-0.6	0.8
2000	0.3	2.5	2.5	2.8	-0.6	-0.6	1.7	0.3	1.9	1.2
2001	-1.0	1.8	-3.1	-0.8	-3.1	-1.6	-1.1	-2.9	0.1	-1.5
2002	0.9	1.0	5.2	-0.3	1.8	-1.5	2.7	7.2	4.3	2.4
2003	-2.9	-3.5	-0.8	4.3	-1.0	2.2	3.1	-4.6	0.5	0.1
2004	5.0	6.1	2.2	-0.8	1.0	-0.6	1.7	6.2	2.0	2.1
2005	-4.9	-5.7	-0.8	-3.0	-4.1	-5.2	-1.7	-2.0	-2.9	-3.1
2006	-1.2	-2.7	-7.4	-3.2	-3.8	-2.5	-3.8	-7.3	-3.5	-3.9
2007	2.0	-0.1	-1.3	-2.7	-1.4	-5.3	-6.5	-0.7	-6.6	-2.8
2008	-0.9	-3.0	-4.4	-3.6	-3.4	-4.0	-5.2	-4.2	-6.1	-3.9
2009	-1.7	-4.7	0.4	-0.9	-0.7	-2.0	-1.9	-2.2	-3.6	-1.6
2010	9.3	7.5	7.0	3.6	8.2	3.1	3.9	10.2	3.8	6.1
2011	-6.1	-10.4	-5.3	-6.0	-5.0	-6.4	-5.0	-6.9	-4.7	-5.6
2012	1.1	-2.4	0.0	-1.0	2.3	-1.7	-0.4	0.1	1.5	0.3
2013	0.2	-3.1	-3.4	-2.5	1.6	-2.7	-2.8	-1.2	-1.6	-1.7
2014	-2.1	-5.7	-3.1	-3.2	-0.9	-4.8	-4.5	-3.6	-3.6	-3.2
2015	-1.0	-1.1	-1.3	-2.1	0.3	-2.0	-1.3	-1.6	-0.8	-1.2

Notes:

- "Others" includes welfare facilities, libraries, museums, gyms, assembly facilities and the like.
- "Amusement spot" includes play houses, motion picture theaters, halls, civic auditoriums, and so forth.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.17 Commercial energy consumption per floor space by use

	Energy consumption by purpose (1000 kcal/m ²)						Growth rates (%)					
	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total	Space cooling	Space heating	Water heating	Cooking	Power, etc.	Total
FY 1965	5.1	75.7	68.6	16.4	26.1	191.9	-	-	-	-	-	-
1970	10.1	124.1	102.2	15.1	40.2	291.7	11.4	6.7	4.3	-3.1	9.1	5.7
1975	15.9	133.2	104.9	13.5	50.7	318.2	4.9	-11.6	-3.7	1.6	7.6	-5.1
1980	12.6	106.4	80.4	15.7	66.5	281.6	-20.3	-5.0	-10.7	-1.2	0.4	-6.1
1985	16.0	84.5	66.7	16.8	78.2	262.1	-7.0	-1.3	-4.4	0.4	5.7	-0.4
1990	22.9	74.3	71.8	18.0	96.8	283.8	23.8	4.8	1.5	2.1	4.2	4.9
1991	22.2	76.6	78.8	18.5	100.4	296.5	-3.1	3.1	9.9	2.9	3.7	4.5
1992	21.4	80.7	73.9	18.2	102.5	296.8	-3.8	5.3	-6.2	-1.5	2.1	0.1
1993	18.6	75.8	64.0	19.1	103.5	281.0	-13.0	-6.0	-13.4	4.9	0.9	-5.3
1994	26.8	72.1	66.3	19.2	106.6	290.9	44.1	-4.8	3.5	0.1	3.0	3.5
1995	24.9	76.8	63.0	19.7	106.7	291.0	-7.3	6.5	-4.9	2.9	0.1	0.0
1996	23.6	69.2	61.6	20.5	110.7	285.5	-5.2	-9.9	-2.3	4.2	3.8	-1.9
1997	25.8	65.4	62.0	20.3	111.6	285.2	9.7	-5.4	0.7	0.9	0.8	-0.1
1998	26.8	66.7	60.7	19.6	113.9	287.7	3.8	1.9	-2.1	-3.7	2.1	0.9
1999	30.0	64.1	56.1	20.0	114.3	284.5	11.8	-3.8	-7.6	2.3	0.3	-1.1
2000	31.2	64.1	54.3	21.2	112.9	283.7	4.0	-0.2	-3.2	5.9	-1.2	-0.3
2001	31.7	54.8	52.2	21.0	114.8	274.6	1.7	-14.4	-3.7	-0.9	1.6	-3.2
2002	33.5	61.7	48.2	20.5	114.5	278.5	5.7	12.6	-7.7	-2.4	-0.3	1.4
2003	25.3	57.6	52.6	22.8	117.1	275.5	-24.5	-6.6	9.0	11.3	2.4	-1.1
2004	33.1	56.4	49.1	21.9	118.1	278.5	30.6	-2.2	-6.6	-4.2	0.8	1.1
2005	29.6	57.0	45.7	22.2	112.3	266.8	-10.5	1.1	-6.8	1.4	-4.9	-4.2
2006	28.4	46.0	45.0	21.9	112.7	254.1	-4.0	-19.3	-1.5	-1.1	0.4	-4.8
2007	28.3	42.5	38.3	21.2	114.6	244.9	-0.6	-7.6	-15.0	-3.1	1.7	-3.6
2008	27.8	37.0	35.2	20.6	112.2	232.8	-1.6	-12.9	-8.1	-3.1	-2.1	-5.0
2009	25.1	38.3	34.0	21.0	109.5	227.9	-9.6	3.6	-3.5	1.7	-2.4	-2.1
2010	30.0	38.7	32.6	21.2	118.1	240.6	19.4	1.1	-4.1	0.9	7.9	5.6
2011	26.2	38.1	31.1	20.6	111.3	227.4	-12.6	-1.5	-4.6	-2.4	-5.8	-5.5
2012	26.0	37.8	30.5	20.7	111.7	226.8	-0.7	-0.8	-1.9	0.4	0.4	-0.3
2013	26.3	34.9	28.9	20.7	110.8	221.6	0.9	-7.6	-5.4	-0.2	-0.8	-2.3
2014	23.2	33.1	27.1	20.6	109.6	213.5	-11.7	-5.3	-6.1	-0.7	-1.1	-3.7
2015	22.0	32.4	26.4	20.5	108.5	209.9	-5.2	-2.0	-2.5	-0.2	-0.9	-1.7

Source: "2017EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.18 Commercial energy consumption per floor space by use and energy

FY 1970

(Unit : 1,000 kcal/m², %)

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	2.6	7.0	-	-	40.2	49.7	(17.0)
Gas	6.7	-	14.3	13.0	-	34.0	(11.7)
Oil	113.3	3.2	82.1	-	-	198.5	(68.1)
Coal	1.5	-	5.8	2.1	-	9.4	(3.2)
Heat	-	-	0.1	-	-	0.1	(0.0)
Total	124.1	10.1	102.2	15.1	40.2	291.7	(100.0)
Shares	(42.5)	(3.5)	(35.0)	(5.2)	(13.8)	(100.0)	

FY 1980

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	3.1	9.6	-	-	66.5	79.2	(28.1)
Gas	5.8	0.3	14.4	13.9	-	34.4	(12.2)
Oil	96.2	2.7	60.0	-	-	159.0	(56.5)
Coal	1.3	-	4.8	1.8	-	7.9	(2.8)
Heat	-	-	1.1	-	-	1.1	(0.4)
Total	106.4	12.6	80.4	15.7	66.5	281.6	(100.0)
Shares	(37.8)	(4.5)	(28.6)	(5.6)	(23.6)	(100.0)	

FY 1990

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	2.1	15.2	0.3	0.4	96.8	114.8	(40.5)
Gas	5.5	4.4	15.4	16.3	-	41.6	(14.6)
Oil	65.6	3.0	51.0	-	-	119.5	(42.1)
Coal	0.9	-	3.6	1.3	-	5.8	(2.0)
Heat	0.1	0.4	1.5	-	-	2.0	(0.7)
Total	74.3	22.9	71.8	18.0	96.8	283.8	(100.0)
Shares	(26.2)	(8.1)	(25.3)	(6.3)	(34.1)	(100.0)	

FY 2000

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	4.1	16.4	1.0	1.6	112.9	136.0	(48.0)
Gas	7.9	11.1	16.0	18.4	-	53.4	(18.8)
Oil	50.6	2.2	31.8	-	-	84.6	(29.8)
Coal	0.9	-	3.5	1.3	-	5.7	(2.0)
Heat	0.5	1.5	2.0	-	-	4.0	(1.4)
Total	64.1	31.2	54.3	21.2	112.9	283.7	(100.0)
Shares	(22.6)	(11.0)	(19.1)	(7.5)	(39.8)	(100.0)	

FY 2010

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	3.7	13.4	1.7	2.5	118.1	139.4	(57.9)
Gas	9.0	13.8	14.5	17.9	-	55.1	(22.9)
Oil	24.9	1.2	13.0	-	-	39.0	(16.2)
Coal	0.5	-	2.1	0.8	-	3.4	(1.4)
Heat	0.6	1.6	1.4	-	-	3.7	(1.5)
Total	38.7	30.0	32.6	21.2	118.1	240.6	(100.0)
Shares	(16.1)	(12.5)	(13.5)	(8.8)	(49.1)	(100.0)	

FY 2015

	Space heating	Space cooling	Water heating	Cooking	Power, etc.	Total	Shares
Electricity	3.2	8.6	1.7	2.6	108.5	124.6	(59.4)
Gas	9.3	11.0	13.6	17.2	-	51.0	(24.3)
Oil	18.8	0.9	7.9	-	-	27.6	(13.1)
Coal	0.5	-	2.1	0.8	-	3.4	(1.6)
Heat	0.5	1.5	1.2	-	-	3.2	(1.5)
Total	32.4	22.0	26.4	20.5	108.5	209.9	(100.0)
Shares	(15.5)	(10.5)	(12.6)	(9.8)	(51.7)	(100.0)	

Notes:

- "Gas" includes town gas and liquefied petroleum gas (LP gas).
- "Thermal" includes geothermal and solar thermal.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.19 Transportation energy consumption (by mode)

(Unit : 10¹⁰kcal)

	Passenger								Freight						Total transport	
	Total	Growth rates (%)	Private vehicle	Business Vehicle	Bus	Rail	Internal navigation	Domestic aviation	Total	Growth rates (%)	Vehicle	Rail	Internal navigation	Domestic aviation	Total	Growth rates (%)
FY 1965	7,912	-	3,528	1,487	904	1,482	65	445	11,145	-	7,036	2,126	1,964	20	19,058	7.9
1970	15,927	14.5	10,353	1,949	1,188	1,374	106	956	18,346	10.4	12,821	1,216	4,243	66	34,273	12.3
1975	23,811	7.5	17,030	2,089	1,425	1,459	143	1,665	22,484	3.1	15,685	405	6,268	126	46,296	5.3
1980	29,737	0.9	22,536	1,869	1,331	1,511	129	2,360	25,264	-3.6	18,891	320	5,833	221	55,002	-1.2
1985	33,861	3.4	26,551	2,110	1,251	1,518	96	2,336	25,019	1.2	19,734	193	4,769	323	58,880	2.4
1990	44,304	6.5	35,623	2,381	1,463	1,837	160	2,840	30,081	1.6	25,894	160	3,613	414	74,386	4.5
1991	47,186	6.5	38,038	2,657	1,476	1,877	203	2,935	30,591	1.7	26,211	160	3,794	426	77,777	4.6
1992	48,836	3.5	39,741	2,494	1,478	1,893	188	3,041	30,646	0.2	26,398	164	3,644	440	79,482	2.3
1993	49,696	1.8	41,116	1,914	1,462	1,897	179	3,129	30,513	-0.4	26,214	156	3,675	468	80,209	0.9
1994	52,394	5.4	43,551	1,806	1,517	1,941	163	3,417	31,609	3.6	27,404	152	3,556	496	84,003	4.7
1995	54,192	3.4	45,168	1,735	1,505	1,947	140	3,697	32,448	2.7	27,977	154	3,794	523	86,640	3.1
1996	56,030	3.4	46,713	2,089	1,473	1,936	205	3,614	32,885	1.3	28,153	149	4,076	507	88,915	2.6
1997	57,478	2.6	47,930	2,300	1,468	1,952	209	3,619	32,753	-0.4	27,864	149	4,207	534	90,231	1.5
1998	58,490	1.8	48,973	2,252	1,446	1,962	181	3,676	32,771	0.1	27,235	146	4,849	541	91,261	1.1
1999	59,669	2.0	50,186	2,341	1,470	1,932	244	3,496	33,121	1.1	27,336	141	5,104	540	92,790	1.7
2000	58,079	-2.7	49,559	1,531	1,375	1,937	208	3,469	32,660	-1.4	26,673	139	5,279	570	90,739	-2.2
2001	58,896	1.4	49,929	1,582	1,392	1,928	212	3,853	32,097	-1.7	26,205	137	5,229	526	90,993	0.3
2002	58,849	-0.1	50,286	1,606	1,365	1,901	175	3,516	31,771	-1.0	25,790	135	5,325	521	90,620	-0.4
2003	58,796	-0.1	50,320	1,583	1,407	1,940	145	3,401	31,468	-1.0	25,636	137	5,148	547	90,264	-0.4
2004	59,530	1.2	50,681	1,499	1,499	1,921	179	3,751	31,761	0.9	26,207	136	4,869	550	91,291	1.1
2005	59,041	-0.8	49,925	1,494	1,503	2,007	172	3,940	30,944	-2.6	25,970	140	4,277	557	89,985	-1.4
2006	57,845	-2.0	48,537	1,483	1,533	1,983	155	4,154	31,042	0.3	26,377	138	3,957	572	88,887	-1.2
2007	56,762	-1.9	47,033	1,439	1,531	1,995	166	4,599	30,014	-3.3	25,835	134	3,457	588	86,777	-2.4
2008	54,787	-3.5	45,379	1,375	1,456	1,983	164	4,430	28,726	-4.3	24,928	132	3,120	546	83,513	-3.8
2009	54,266	-1.0	45,264	1,344	1,452	1,967	145	4,094	27,599	-3.9	24,100	126	2,835	538	81,865	-2.0
2010	54,826	1.0	45,780	1,284	1,623	1,987	144	4,007	27,836	0.9	24,418	124	2,784	511	82,661	1.0
2011	52,983	-3.4	45,022	1,207	1,544	1,882	146	3,183	27,737	0.4	24,432	120	2,686	498	80,720	-2.3
2012	51,937	-2.0	44,164	1,186	1,586	1,878	139	2,986	27,914	0.6	24,603	120	2,691	498	79,851	-1.1
2013	50,877	-2.0	42,107	1,152	1,647	1,960	145	3,865	28,416	1.8	25,262	126	2,508	521	79,294	-0.7
2014	48,964	-3.8	40,342	1,072	1,569	1,931	154	4,097	28,001	-1.5	24,735	126	2,417	521	76,966	-2.9
2015	49,238	0.6	40,277	1,006	1,589	1,959	144	4,263	27,821	-0.6	24,956	125	2,239	501	77,058	0.1

Source: "2017 EDMC HANDBOOK OF ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.20 Energy intensity by mode

	Passenger (kcal / passenger- km)								Freight (kcal / ton- km)					
	Total	Growth rates (%)	Private vehicle	Business vehicle	Bus	Rail	Internal navigation	Domestic aviation	Total	Growth rates (%)	Vehicle	Rail	Internal navigation	Domestic aviation
FY 1965	191	-	561	1,651	113	58	167	1,507	649	-	2,057	376	243	9,519
1970	227	1.9	373	1,257	115	48	160	1,026	593	-0.5	1,347	194	281	8,951
1975	297	5.6	518	1,671	129	45	207	870	700	7.7	1,732	86	341	8,313
1980	335	0.4	544	1,433	121	48	211	795	657	-2.4	1,514	86	263	7,631
1985	340	-0.5	520	1,667	119	46	167	705	673	1.6	1,376	88	232	6,688
1990	342	4.0	490	1,896	133	47	255	550	652	-5.0	1,373	59	148	5,178
1991	355	3.9	511	2,061	136	47	328	530	649	-0.6	1,342	59	153	5,250
1992	362	1.8	519	1,985	139	47	309	537	653	0.7	1,362	62	147	5,469
1993	367	1.6	533	1,571	142	47	295	548	679	4.0	1,382	61	157	5,728
1994	386	5.1	556	1,561	152	49	273	558	689	1.5	1,405	62	149	5,694
1995	391	1.4	560	1,566	155	49	249	569	695	0.9	1,382	61	159	5,662
1996	399	1.9	567	1,959	155	48	363	523	689	-0.9	1,341	60	169	5,265
1997	406	1.8	571	2,234	158	49	391	494	693	0.6	1,325	60	177	5,440
1998	411	1.4	575	2,272	160	50	393	484	717	3.5	1,320	64	214	5,492
1999	420	2.0	587	2,406	166	50	546	441	714	-0.3	1,298	62	222	5,200
2000	410	-2.3	582	1,582	157	50	483	435	682	-4.6	1,245	63	218	5,301
2001	414	1.0	583	1,669	161	50	530	473	666	-2.2	1,225	62	214	5,296
2002	414	-0.1	587	1,680	158	50	450	419	673	1.0	1,210	61	226	5,259
2003	413	-0.2	588	1,648	163	50	360	408	682	1.2	1,167	60	236	5,323
2004	420	1.8	596	1,611	174	50	463	458	682	0.0	1,172	60	222	5,198
2005	419	-0.3	599	1,620	171	51	428	473	667	-2.1	1,137	61	202	5,179
2006	413	-1.5	594	1,612	173	50	411	484	663	-0.7	1,116	59	190	5,223
2007	402	-2.5	574	1,614	172	49	433	545	640	-3.5	1,069	57	170	5,125
2008	393	-2.3	563	1,620	162	49	468	547	642	0.3	1,055	59	166	5,059
2009	396	0.8	565	1,648	166	50	471	544	662	3.1	1,056	61	169	5,149
2010	407	2.7	584	1,647	189	51	479	543	620	-6.3	985	61	155	4,942
2011	396	-2.6	579	1,655	187	48	478	447	643	3.7	1,037	60	154	5,014
2012	377	-4.9	552	1,645	188	46	448	383	679	5.7	1,162	59	151	4,898
2013	369	-2.2	534	1,635	199	47	446	459	672	-1.1	1,170	60	136	4,735
2014	356	-3.4	515	1,547	195	47	516	472	671	-0.1	1,168	60	132	4,635
2015	356	0.0	516	1,545	199	46	N.A.	483	680	1.3	1,211	58	124	4,471

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.21 Trends in proportion of power generation by energy source

(Unit : %)

	Thermal power	Hydroelectric generation and others	Nuclear power	Others
FY 1990	60.5	12.1	27.3	-
1991	59.3	12.9	27.8	-
1992	60.2	10.9	28.9	-
1993	55.3	12.7	32.0	-
1994	59.1	8.6	32.3	-
1995	55.5	10.5	34.0	-
1996	55.2	10.2	34.6	-
1997	53.2	11.2	35.6	-
1998	51.8	11.3	36.8	-
1999	55.2	10.3	34.5	-
2000	55.5	10.2	34.3	-
2001	55.2	10.2	34.6	-
2002	59.0	9.8	31.2	-
2003	63.1	11.3	25.7	-
2004	60.1	10.9	29.1	-
2005	60.1	9.1	30.8	-
2006	59.5	10.0	30.5	-
2007	65.9	8.6	25.6	-
2008	65.2	8.8	26.0	-
2009	61.4	9.4	29.2	-
2010	61.8	9.7	28.6	-
2011	78.9	10.4	10.7	-
2012	88.4	10.0	1.7	-
2013	88.4	10.7	1.0	-
2014	87.8	12.2	0.0	-
2015	82.9	14.9	0.8	1.5

Note:

FY1990 - FY2014: Generating end power of member companies of the Federation of Electric Power Companies of Japan. (including electric power the companies receive from others)

FY2015 - : Transmission end power of member companies of the Electricity Power Council for a Low Carbon Society.

Others indicate that energy source is unknown.

Source : The Council on Industrial Structure and the Federation

1.22 Trends in rate of utilization for nuclear power plants

	Rate of Utilization (%)
FY 1990	72.7
1991	73.8
1992	74.2
1993	75.4
1994	76.6
1995	80.2
1996	80.8
1997	81.3
1998	84.2
1999	80.1
2000	81.7
2001	80.5
2002	73.4
2003	59.7
2004	68.9
2005	71.9
2006	69.9
2007	60.7
2008	60.0
2009	65.7
2010	67.3
2011	23.7
2012	3.9
2013	2.3
2014	0.0
2015	2.5

Source: "Outline of Demand and Supply for Electric Power," by Electricity and Gas Industry Department, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry.

"Report on Power Received and Generated by The Federation of Electric Power Companies of Japan"

1.23 Trend in CO₂ emissions per unit of user-end electricity

	CO ₂ emissions intensity (kgCO ₂ / kWh)
FY 1990	0.417
1991	0.408
1992	0.416
1993	0.386
1994	0.412
1995	0.389
1996	0.382
1997	0.366
1998	0.354
1999	0.373
2000	0.376
2001	0.376
2002	0.404
2003	0.433
2004	0.418
2005	0.423
2006	0.410
2007	0.453
2008	0.444(0.373) *
2009	0.412(0.351) *
2010	0.413(0.350) *
2011	0.510(0.476) *
2012	0.571(0.487) *
2013	0.570
2014	0.556[0.553]*
2015	0.534

Note:

FY1990 - FY2014: CO₂ emissions intensity of member companies of the Federation of Electric Power Companies of Japan. (including electric power the companies receive from other companies)

FY2015 - : CO₂ emissions intensity of member companies of the Electricity Power Council for a Low Carbon Society.

• Parenthesized figures are the values reflecting Kyoto Mechanisms Credit.

• Bracketed figures are CO₂ emissions intensity of member companies of the Electricity Power Council for a Low Carbon a Low Carbon Society in FY2014.

Source: The Council on Industrial Structure

1.24 New energy supply

	New energy supply (10 ¹⁰ kcal)			Growth rates (%)		
	Solar heat	Geothermal	Waste	Solar heat	Geothermal	Waste
FY 1965	-	-	5	-	-	0.0
1970	-	66	10	-	20.0	11.1
1975	136	96	34	-	29.7	17.2
1980	370	290	107	73.7	3.9	40.8
1985	878	398	227	8.5	6.4	8.1
1990	1,167	465	407	13.3	26.4	19.0
1991	1,129	506	437	-3.3	8.8	7.4
1992	1,077	510	465	-4.6	0.8	6.4
1993	1,051	504	491	-2.4	-1.2	5.6
1994	1,031	589	516	-1.9	16.9	5.1
1995	1,006	922	631	-2.4	56.5	22.3
1996	958	1,071	756	-4.8	16.2	19.8
1997	958	1,097	896	0.0	2.4	18.5
1998	845	1,031	1,007	-11.8	-6.0	12.4
1999	768	1,008	1,047	-9.1	-2.2	4.0
2000	808	964	1,012	5.2	-4.4	-3.3
2001	747	999	1,148	-7.5	3.6	13.4
2002	684	990	1,303	-8.4	-0.9	13.5
2003	635	1,017	1,482	-7.2	2.7	13.7
2004	600	984	1,470	-5.5	-3.2	-0.8
2005	569	943	1,431	-5.2	-4.2	-2.7
2006	540	899	1,451	-5.1	-4.7	1.4
2007	513	889	1,440	-5.0	-1.1	-0.8
2008	489	802	1,400	-4.7	-9.8	-2.8
2009	444	843	1,388	-9.2	5.1	-0.9
2010	411	769	1,455	-7.4	-8.8	4.8
2011	376	783	1,511	-8.5	1.8	3.8
2012	348	764	1,564	-7.4	-2.4	3.5
2013	317	759	1,585	-8.9	-0.7	1.3
2014	290	753	1,583	-8.5	-0.8	-0.1
2015	267	745	1,594	-7.9	-1.1	0.7

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.25 Installed capacity and utilization of new energy

	Power						Heat					Total 10,000 KL	Share in TPES
	Photovoltaics		Wind		Waste+ biomass		Biomass	Solar	Waste	Unutilized energy*	Black liquor and waste wood		
	10,000 KL	10,000 KW	10,000 KL	10,000 KW	10,000 KL	10,000 KW	10,000 KL	10,000 KL	10,000 KL	10,000 KL	10,000 KL		
FY 1990	0.3		0.04	0.1	44	-	N.A.	132	2.7	0.8	477	657	1.2%
1991	0.4		0.1	0.3	47	-	N.A.	135	3.2	1.1	490	677	1.3%
1992	0.5		0.1	0.3	50	-	N.A.	136	3.6	1.3	478	670	1.2%
1993	0.6		0.2	0.5	53	-	N.A.	137	3.6	1.4	462	658	1.2%
1994	0.8		0.3	0.5	66	54	N.A.	138	3.5	2.4	449	660	1.1%
1995	1.1		0.4	1.0	81	65	N.A.	135	3.8	3.0	472	696	1.2%
1996	1.5		0.6	1.4	91	76	N.A.	130	4.4	3.3	477	708	1.2%
1997	2.3		0.9	2.2	101	82	N.A.	122	4.6	3.7	493	728	1.2%
1998	3.4		1.6	3.8	114	93	N.A.	110	4.4	4.1	457	695	1.2%
1999	5.3	20.9	3.5	8.3	120	98	N.A.	98	4.4	4.1	457	693	1.2%
2000	8.1	33.0	5.9	14.4	120	110	N.A.	89	4.5	4.5	490	722	1.2%
2001	11.0	45.2	12.7	31.2	130	118	N.A.	82	4.5	4.4	446	690	1.2%
2002	15.6	63.7	18.9	46.3	175	162	68.0	74	164.0	4.6	471	991	1.7%
2003	21.0	86.0	27.6	67.8	214	174	79.0	69	161.0	4.2	478	1,054	1.8%
2004	27.7	113.2	37.8	92.7	227	201	122.0	65	165.0	4.6	470	1,119	N.A.
2005	34.7	142.2	44.2	108.5	252	215	142.0	61	149.0	4.9	470	1,159	N.A.
2006	41.8	170.9	60.7	149.1	291	210	156.3	58	150.1	4.7	499	1,262	N.A.
2007	46.9	191.9	68.2	167.5	269	216	197.8	55	151.8	5.0	499	1,293	N.A.
2008	52.4	214.4	75.3	185.0	314	237	175.3	51	148.1	4.6	486	1,307	N.A.
2009	64.2	262.7	89.0	218.6	312	237	170.9	48	146.9	4.5	447	1,282	N.A.
2010	88.4	361.8	99.4	244.2	327	240	173.7	44	137.8	4.7	492	1,368	N.A.
2011	120.0	491.0	104.1	255.5	333	243	178.5	41	136.4	4.2	464	1,381	N.A.
2012	168.4	689.0	107.6	264.0	335	244	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2013	340.4	1,393.0	108.8	267.0	347	253	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2014	569.9	2,332.0	117.8	289.1	361	263	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2015	793.8	3,248.0	124.0	304.4	401	293	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Notes:

* * Includes Snow/ice heat energy thermal utilization.

* Data in FY2012 and onward are estimated by EDMC.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.26 Energy balance by country and region (production amount, consumption amount)

(Unit: PJ)

Country (region)	Production of primary energy						Final energy consumption					
	Total	Solid	Liquid	Gas	Electric power	Thermal	Total	Non-energy use	Industry	Transportation	Other	Consumption per capita (PJ)
World	567,050	220,840	177,770	122,003	16,460	29,977	370,796	33,866	117,270	91,640	128,020	52
Asia												
Japan	1,172	470	22	114	351	215	13,095	1,621	3,463	3,064	4,948	103
UAE	8,792	-	6,874	1,918	-	-	* 2,418	* 93	* 1,441	537	347	* 267
Iraq	6,522	2	6,249	250	21	-	1,064	40	178	490	356	31
Iran	12,544	114	6,794	5,533	54	49	7,533	1,100	* 1,728	1,829	2,875	98
India	22,401	18,384	1,789	1,216	643	370	24,045	1,524	9,630	3,101	* 9,790	19
Indonesia	19,754	15,092	1,725	2,537	61	339	7,077	244	2,510	1,718	* 2,606	28
Uzbekistan	2,267	59	132	2,033	42	-	1,270	66	281	113	810	44
Oman	3,151	0	1,965	1,186	-	-	757	89	397	172	99	194
Kazakhstan	7,198	2,198	3,483	1,489	28	-	1,804	34	1,023	208	538	105
Qatar	9,271	0	3,252	6,019	-	-	667	181	247	161	78	317
Republic of Korea	1,799	206	31	27	27	1,508	7,080	1,878	2,002	1,315	1,884	142
North Korea	1,009	960	-	-	49	-	534	-	342	18	173	21
Kuwait	7,113	0	6,555	558	-	-	642	118	192	180	152	179
Saudi Arabia	25,573	-	22,770	2,803	0	-	5,525	1,056	1,932	1,728	809	183
Thailand	3,036	1,151	642	1,217	26	0	3,512	464	1,187	957	905	52
China	108,185	89,757	9,195	4,186	3,841	1,205	74,832	6,811	40,360	9,196	18,465	55
Turkmenistan	3,210	0	535	2,675	-	-	741	-	94	139	508	141
Turkey	1,352	837	103	27	241	144	3,566	298	994	812	1,461	47
Pakistan	2,009	607	160	1,079	112	51	2,326	117	696	544	970	13
Philippines	935	394	36	123	36	346	1,158	19	264	385	490	12
Vietnam	2,887	1,604	720	353	210	-	2,093	6	804	440	842	23
Malaysia	3,529	117	1,240	2,133	39	-	2,109	349	547	834	379	72
North America												
USA	78,449	22,596	20,525	24,067	1,639	9,621	63,112	4,906	10,945	25,994	21,267	199
Canada	17,868	1,958	7,878	5,467	1,453	1,112	8,353	986	2,002	2,591	2,773	237
Trinidad and Tobago	1,673	0	229	1,444	-	-	564	404	94	45	22	418
Mexico	8,849	694	5,988	1,697	116	353	4,934	227	1,458	2,130	1,119	40
South America												
Argentina	2,981	96	1,393	1,304	120	67	2,436	206	686	648	896	57
Colombia	5,700	2,654	2,414	469	162	-	1,054	15	266	402	372	22
Chile	626	495	21	35	73	2	1,112	26	417	338	330	63
Brazil	10,360	2,961	5,091	709	1,431	167	9,966	648	3,623	3,715	1,979	49
Venezuela	7,716	74	6,522	820	301	-	1,876	* 82	905	596	293	62
Peru	982	148	307	444	80	2	735	16	197	281	241	24
Europe												
UK	4,557	463	1,744	1,453	127	771	5,434	269	979	1,663	2,524	85
Italy a	1,542	396	266	341	321	217	5,104	267	1,097	1,517	2,222	85
Ukraine	3,578	1,771	134	671	54	947	2,959	207	927	498	1,328	66
Austria	507	232	46	55	165	9	1,177	77	336	354	410	139
Netherlands	2,908	107	145	2,599	23	33	2,596	644	516	472	964	154
Greece	390	318	9	4	51	9	643	27	120	238	258	58
Switzerland b	539	97	0	4	141	298	854	22	158	253	421	105
Sweden	1,450	452	17	6	256	718	1,367	87	463	323	494	142
Spain	1,508	415	52	14	356	671	3,525	212	876	1,199	1,238	76
Serbia	473	367	51	18	37	0	359	23	98	81	157	40
Czech Republic	1,258	853	19	33	19	335	1,066	107	284	244	431	101
Germany	5,032	2,637	274	659	381	1,081	9,486	918	2,302	2,321	3,944	118
Norway	8,133	111	3,547	4,004	469	1	860	98	242	203	317	169
Hungary	426	132	50	68	3	172	696	77	142	151	326	70
Finland	755	429	15	2	49	259	927	47	330	180	370	170
France c	5,659	564	146	30	330	4,589	6,705	572	1,177	1,856	3,099	105
Bulgaria	443	248	3	9	25	158	380	20	108	111	142	52
Belarus	167	88	71	8	1	-	830	94	192	184	361	87
Belgium	619	101	18	8	24	468	1,762	396	396	359	612	158
Poland	2,969	2,699	69	168	30	2	2,799	214	609	664	1,313	72
Portugal	241	122	11	3	94	10	696	58	194	230	214	67
Romania	1,090	350	181	361	72	127	955	63	247	218	426	48
Russia	56,266	8,020	22,113	23,583	652	1,897	18,284	2,924	5,201	3,940	6,219	128
Africa												
Algeria	5,676	1	2,789	2,885	1	-	1,327	109	223	521	475	35
Egypt	3,445	219	1,464	1,709	53	-	2,547	* 317	856	426	948	29
Tunis	298	40	134	118	2	5	304	8	88	86	124	28
Nigeria	10,668	4,560	4,817	1,271	19	-	* 4,896	47	* 411	341	* 4,098	* 28
South Africa	6,999	6,783	12	43	5	156	3,108	158	1,135	792	1,023	58
Morocco	82	63	0	3	15	-	603	17	129	205	251	18
Libya	2,554	7	2,191	356	-	-	516	76	27	303	109	82
Oceania												
Australia	14,368	11,234	819	2,196	106	13	3,370	196	1,043	1,305	826	145
New Zealand	739	160	76	171	90	242	555	49	173	192	141	124

Notes:

* indicates provisional or estimated values.

a: Including San Marino and Vatican City.

b: Including Liechtenstein.

c: Including Monaco.

Source: "World Statistics 2017," Ministry of Internal Affairs and Communications

1.27 Consumption of coal, oil, natural gas and electric power

Country (region)	Coal (excluding lignite)		Crude oil		Natural gas		Electric power	
	Consumption (1,000t)	Consumption per person (kg)	Consumption (1,000t)	Consumption per person (kg)	consumption (Trillion J)	Consumption per person (Million J)	Consumption (Million kWh)	Consumption per person (kWh)
World	6,823,128	950	3,752,439	523	134,423,641	18,718	23,430,761	3,263
Asia								
Japan	195,607	1,540	167,602	1,320	5,019,550	39,529	1,045,293	8,232
Azerbaijan	5	1	6,511	686	404,896	42,632	22,986	2,420
UAE	2,649	293	4,781	529	2,584,165	285,860	109,956	12,163
Yemen	185	7	3,323	130	41,692	1,633	8,501	333
Israel	11,551	1,478	11,830	1,513	267,050	34,159	55,264	7,069
Iraq	-	-	28,874	847	277,522	8,137	82,802	2,428
Iran	847	11	90,398	1,172	5,995,460	77,709	254,555	3,299
India	739,553	578	226,323	177	2,069,444	1,617	1,199,078	937
Indonesia	33,787	134	40,829	162	1,316,334	5,239	219,216	872
Uzbekistan	56	2	2,997	103	1,747,819	60,200	54,292	1,870
Oman	-	-	5,654	1,447	923,486	236,373	26,240	6,716
Kazakhstan	79,742	4,663	19,982	1,169	1,408,743	82,385	94,519	5,528
Qatar	-	-	6,093	2,900	1,404,400	668,352	34,668	16,498
Korea	126,119	2,530	123,691	2,481	2,217,299	44,482	541,996	10,873
South Korea	15,100	607	535	21	-	-	19,524	784
Kuwait	-	-	45,464	12,651	702,658	195,526	60,982	16,969
Saudi Arabia	-	-	105,947	3,508	3,114,266	103,118	284,017	9,404
Syria	-	-	5,457	282	213,005	11,024	25,404	1,315
Singapore	427	79	46,441	8,592	413,405	76,485	47,964	8,874
Thailand	18,531	275	52,310	776	1,760,864	26,106	176,997	2,624
China	a 4,250,148	a 3,119	486,709	357	6,507,611	4,776	5,420,406	3,978
Turkmenistan	-	-	8,091	1,544	941,297	179,634	16,020	3,057
Turkey	28,178	370	20,871	274	1,747,095	22,921	246,356	3,232
Bahrain	-	-	13,308	9,862	541,345	401,167	25,933	19,218
Pakistan	5,984	33	11,101	61	1,198,823	6,616	98,184	542
Bangladesh	1,960	12	1,301	8	881,823	5,611	53,043	338
Philippines	-	-	7,692	79	136,949	1,404	75,300	772
Brunei	-	-	274	666	114,336	277,852	4,402	10,697
Vietnam	26,494	290	9,619	105	391,953	4,289	128,589	1,407
Hong Kong	12,346	1,723	-	-	96,693	13,497	47,382	6,614
Malaysia	24,270	824	26,494	899	1,531,074	51,962	138,529	4,701
Myanmar	582	11	599	11	85,404	1,612	12,247	231
North America								
USA	365,439	1,152	745,480	2,351	28,489,677	89,834	4,365,162	13,764
Canada	6,021	171	60,150	1,707	4,049,103	114,931	601,916	17,085
Cuba	*3	0	*8,928	*786	41,596	3,661	19,140	1,684
Guatemala	497	32	60	4	-	-	9,470	604
Costa Rica	3	1	3	1	-	-	12,290	2,611
Jamaica	89	32	1,167	421	-	-	4,256	1,535
Dominican Republic	850	83	1,367	133	-	3,837	18,799	1,828
Trinidad and Tobago	-	-	6,817	5,056	834,846	619,212	9,505	7,050
Mexico	3,254	26	67,166	543	2,888,257	23,341	297,049	2,401
South America								
Argentina	890	21	26,055	613	1,844,997	43,373	148,919	3,501
Uruguay	3	1	2,085	612	2,294	673	11,451	3,360
Ecuador	-	-	8,362	534	26,822	1,713	23,892	1,526
Colombia	6,737	142	17,839	377	469,687	9,921	70,050	1,480
Chile	11,327	644	9,406	535	188,997	10,753	73,065	4,157
Brazil	26,101	128	93,636	458	1,444,868	7,074	611,170	2,992
Venezuela	288	10	48,706	1,609	986,130	32,571	123,875	4,092
Peru	1,209	40	6,471	212	241,169	7,890	43,330	1,418
Europe								
Ireland	2,134	457	2,838	608	179,933	38,519	28,242	6,046
UK	60,358	944	58,477	914	3,055,597	47,777	373,585	5,841
Italy b	20,576	344	62,685	1,048	2,669,630	44,641	331,945	5,551
Ukraine	71,322	1,579	2,900	64	1,835,464	40,639	184,487	4,085
Austria	3,491	411	8,566	1,009	326,185	38,434	75,573	8,905
Netherlands	12,979	772	47,849	2,847	1,546,149	91,983	119,111	7,086
Greece	302	27	19,856	1,796	150,552	13,618	59,039	5,340
Switzerland c	154	19	4,846	594	143,874	17,641	67,916	8,327
Sweden	2,832	294	16,494	1,714	44,440	4,618	143,164	14,875
Spain	18,937	408	58,154	1,252	1,217,097	26,199	276,815	5,959
Slovakia	3,917	723	5,791	1,069	223,968	41,328	28,923	5,337
Serbia	103	12	2,748	307	86,832	9,715	37,340	4,178
Czech Republic	7,057	669	6,664	632	323,147	30,644	70,178	6,655
Denmark	5,344	950	7,156	1,272	154,259	27,427	35,831	6,371
Germany	62,744	779	92,614	1,150	3,400,715	42,210	600,965	7,459
Norway	724	142	15,438	3,037	266,816	52,487	129,207	25,417
Hungary	1,332	134	5,968	601	353,581	35,627	42,150	4,247
Finland	5,836	1,070	11,071	2,030	133,027	24,395	86,966	15,948
France d	18,329	287	55,615	871	1,814,662	28,406	524,056	8,203
Bulgaria	1,759	243	5,623	775	111,086	15,317	37,603	5,185
Belarus	543	57	21,182	2,230	795,073	83,716	37,877	3,988
Belgium	4,997	448	27,627	2,477	669,671	60,043	93,096	8,347
Poland	78,783	2,040	24,203	627	638,527	16,534	160,036	4,144
Portugal	4,448	425	11,912	1,139	174,723	16,704	54,448	5,205
Romania	224	11	9,293	469	455,613	23,018	56,871	2,873
Russia	137,135	957	262,355	1,830	18,382,870	128,222	1,045,416	7,292
Africa								
Algeria	-	-	21,481	563	1,330,452	34,841	59,801	1,566
Angola	-	-	2,268	97	15,504	661	5,995	256
Egypt	419	5	24,012	274	1,837,665	20,975	167,651	1,914
Ghana	-	-	1,303	50	12,211	467	12,544	479
Cameroon	-	-	2,372	107	17,816	802	6,849	308
Kenya	379	9	549	13	-	-	8,461	194
Côte d'Ivoire	-	-	3,731	173	74,403	3,441	6,930	320
Republic of the Cong	-	-	0	0	331	5	8,627	119
Zambia	223	15	627	41	-	-	*12308	*807
Zimbabwe	3,935	264	-	-	-	-	10,589	711
Sudan	-	-	4,009	104	-	-	10,607	275
Tanzania	85	2	-	-	37,964	756	5,633	112
Tunisia	0	0	1,750	159	246,465	22,394	18,326	1,665
Nigeria	44	0	5,088	29	548,946	3,176	28,961	168
South Africa	181,879	3,405	23,370	438	190,389	3,564	251,572	4,710
Mozambique	15	1	0	0	7,262	274	14,926	564
Morocco	4,547	134	5,548	163	48,141	1,416	33,534	986
Libya	-	-	7,314	1,167	178,600	28,503	30,346	4,843
Oceania								
Australia	31,065	1,335	29,220	1,256	1,382,893	59,427	249,060	10,703
New Zealand	405	91	5,231	1,171	185,131	41,460	43,256	9,687
Papua New Guinea	-	-	1,280	175	5,317	728	*4,176	*571

Notes:

* Indicates provisional or estimated values.

a. Including lignite.

b. Including San Marino and Vatican city.

c. Including Liechtenstein.

d. Including Monaco.

Source: "World Statistics 2017," Ministry of Internal Affairs and Communications

1.28 World new energy supply

	Wind power generation (cumulative installed wind turbine capacity at the year-end, million kW)				Solar photovoltaic (cumulative photovoltaic power capacity at the year-end, million kW)			
	2000	2005	2010	2015	2000	2005	2010	2015
North America	275.2	986.7	4,505.4	8,915.4	4.0	22.6	235.2	2,836.3
USA	261.0	918.1	4,027.4	7,474.0	1.9	19.0	204.0	2,557.7
Canada	13.9	68.3	401.1	1,119.0	0.7	1.7	28.1	250.4
Mexico	0.3	0.3	76.9	322.4	1.4	1.9	3.1	28.2
Latin America	9.6	19.3	160.6	1,304.9	-	-	-	84.8
Brazil	2.2	2.9	93.1	871.5	N.A.	N.A.	N.A.	N.A.
Europe	1,313.3	4,088.2	8,602.3	14,808.2	18.9	233.5	3,099.8	9,689.3
UK	42.5	133.6	540.1	1,419.1	0.2	1.1	9.5	907.1
Germany	609.7	1,837.5	2,709.2	4,501.8	11.4	205.6	1,794.4	3,969.8
France	6.3	77.5	594.0	1,026.9	1.1	2.6	120.7	655.7
Italy	42.4	171.3	581.4	912.6	1.9	3.8	350.2	1,892.2
Spain	235.8	1,001.3	1,971.5	2,302.5	0.2	5.5	433.0	543.2
Russia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Turkey	1.9	2.0	132.0	450.3	0.0	0.2	0.6	26.6
Africa	13.7	27.8	111.3	351.4	-	-	4.0	112.0
Middle East	1.8	3.0	10.1	27.4	0.1	1.8	17.7	506.2
Asia/Oceania	179.8	792.2	6,376.6	18,065.0	38.2	158.9	577.1	8,989.4
China	35.2	126.4	4,478.1	14,510.9	1.9	6.8	80.0	4,348.0
Japan	14.2	115.9	242.9	308.4	33.0	142.2	361.8	3,540.9
South Korea	0.6	8.9	34.2	77.8	0.4	1.4	65.6	340.8
Indonesia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Malaysia	N.A.	N.A.	N.A.	N.A.	-	-	1.3	23.1
Philippines	-	-	-	21.6	N.A.	N.A.	N.A.	N.A.
Thailand	-	-	0.1	22.3	-	2.4	4.9	142.0
India	122.0	443.0	1,306.5	2,508.8	-	0.1	7.0	88.1
Australia	3.0	71.7	208.4	443.6	2.9	6.1	57.1	506.5
New Zealand	3.5	16.7	49.5	69.0	N.A.	N.A.	N.A.	N.A.
World	1,793.4	5,917.1	19,766.3	43,472.2	131.3	508.3	4,134.6	23,060.6

	Geothermal power generation (cumulative geothermal power capacity at the year-end, million kW)				Biomass power generation (annual production, million t oil equivalent)			
	2000	2005	2010	2014	2000	2005	2010	2014
North America	367.1	385.2	427.2	448.3	310.5	761.2	2,632.2	3,209.5
USA	282.8	289.3	330.8	359.6	300.0	747.8	2,556.8	3,098.3
Canada	N.A.	N.A.	N.A.	N.A.	10.5	13.3	74.1	105.9
Mexico	84.3	96.0	96.5	88.7	-	-	1.3	5.3
Latin America	40.2	42.4	51.0	62.0	526.2	804.3	1,785.9	2,086.7
Brazil	N.A.	N.A.	N.A.	N.A.	522.6	783.5	1,544.0	1,763.6
Europe	102.1	112.4	168.8	236.0	72.3	315.6	1,129.1	1,372.6
UK	N.A.	N.A.	N.A.	N.A.	-	3.9	30.4	35.9
Germany	-	0.0	0.8	2.7	18.9	152.5	288.8	313.0
France	0.4	1.5	1.6	1.7	31.6	43.9	226.9	259.2
Italy	78.5	79.1	88.3	91.6	7.0	34.0	67.0	62.1
Spain	-	-	-	-	7.0	28.2	126.7	100.5
Russia	2.3	7.9	8.2	8.2	N.A.	N.A.	N.A.	N.A.
Turkey	2.0	2.0	9.4	62.4	N.A.	N.A.	N.A.	N.A.
Africa	5.2	17.4	21.6	61.2	0.6	0.6	3.2	6.9
Middle East	N.A.	N.A.	N.A.	N.A.	-	-	0.4	0.4
Asia/Oceania	344.9	382.1	446.6	492.0	8.2	83.4	409.7	808.6
China	2.8	2.8	2.4	2.7	-	62.2	147.9	243.0
Japan	53.5	53.4	50.2	54.4	N.A.	N.A.	N.A.	N.A.
South Korea	N.A.	N.A.	N.A.	N.A.	-	0.9	49.1	37.5
Indonesia	59.0	85.0	119.3	140.1	-	0.9	71.8	134.4
Malaysia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Philippines	193.1	197.8	196.6	191.7	N.A.	N.A.	N.A.	N.A.
Thailand	0.0	0.0	0.0	0.0	-	5.2	66.1	150.8
India	N.A.	N.A.	N.A.	N.A.	8.2	11.4	11.3	36.2
Australia	0.0	0.0	0.1	0.2	-	2.0	20.0	20.5
New Zealand	36.5	42.5	72.3	97.1	N.A.	N.A.	N.A.	N.A.
World	859.4	939.6	1,115.2	1,259.4	-	-	-	-

Notes:

- Geographical grouping is based on BP statistics.
- Biomass power generation includes ethanol fuel and biodiesel fuel.

Source: "2017 EDMC HANDBOOK of ENERGY & ECONOMIC STATISTICS in JAPAN," the Energy Data and Modelling Center (EDMC), the Institute of Energy Economics, Japan (IEEJ)

1.29 Production quantity of marine products (by species) (1)

(Unit: t)

Country (region)	Year	Marine products Total	Aquaculture	Marine products					
				Catching and gathering					
				Marine fishes/crustaceans/molluscs					
				Marine fishes / Crustaceans / Molluscs total	Marine fishes				
					Salmons, trouts, smelts	Flounders, halibuts, soles	Cods, hakes, haddockes	Herrings, sardines, anchovies	Tunas, bonitos, billfishes
World	14	195,720,438	101,090,691	93,445,234	948,230	1,042,230	8,652,019	15,216,439	7,660,220
Asia									
Japan	14	4,772,866	1,020,400	3,660,966	166,432	52,919	254,034	590,415	448,717
Iran	14	947,354	320,174	627,180	17	3,555	...	68,684	249,089
India	14	9,602,842	4,884,021	4,718,821	...	55,806	6,897	633,805	189,375
Indonesia	14	20,838,117	14,330,888	6,436,715	...	27,830	...	504,957	1,386,317
South Korea	14	3,304,772	1,567,442	1,727,643	431	24,949	26,704	254,545	361,365
Cambodia	14	745,310	120,055	625,255	...	...	...	...	...
North Korea	14	734,450	508,450	226,000	...	4,200	65,600	...	...
Sri Lanka	14	569,270	34,220	535,050	...	...	...	132,829	133,128
Thailand	14	2,704,304	934,758	1,769,546	...	7,358	...	218,981	43,394
Taiwan	14	1,408,972	340,567	1,068,278	...	573	...	2,406	402,626
China	14	76,147,372	58,795,275	17,106,547	...	...	2	1,096,059	598,126
Turkey	14	536,516	234,302	302,214	431	615	10,209	156,165	20,887
Pakistan	14	623,457	148,381	475,076	...	1,090	...	57,154	59,238
Bangladesh	14	3,548,115	1,956,925	1,591,190	...	...	...	...	3,903
Philippines	14	4,688,858	2,337,605	2,350,886	...	657	...	433,712	583,419
Vietnam	14	6,330,591	3,411,391	2,919,200	...	...	...	...	82,664
Malaysia	14	1,985,085	521,014	1,464,071	...	6,481	...	68,576	85,750
Myanmar	14	5,047,526	964,256	4,083,270	...	...	...	...	11,200
North/South America									
USA	14	5,410,190	425,870	4,975,947	331,542	334,220	2,034,539	745,244	327,350
Argentina	14	833,943	4,008	829,935	...	5,830	333,692	14,426	264
Ecuador	14	1,031,747	368,207	663,540	...	1,580	13,683	42,865	328,588
Canada	14	1,010,508	133,783	862,365	43,852	47,860	88,716	137,787	7,163
Chile	14	3,820,176	1,227,359	2,175,486	...	18	82,083	1,396,779	5,895
Brazil	14	1,329,559	562,533	767,026	...	2,804	7,842	85,489	51,636
Peru	14	3,714,469	115,271	3,573,371	329	141	63,940	2,326,605	68,774
Mexico	14	1,722,607	194,230	1,519,893	295	5,307	10,422	594,719	170,303
Europe									
Iceland	14	1,103,629	8,433	1,076,769	211	19,235	522,392	157,895	32
UK	14	960,307	204,617	755,690	299	32,641	139,939	107,275	775
Italy	14	344,574	162,550	180,824	650	3,134	10,748	58,054	8,607
Netherlands	14	430,176	60,290	369,886	819	45,279	41,936	158,059	66
Spain	14	1,393,930	282,242	1,109,537	1,852	11,894	179,054	92,120	362,204
Denmark	14	784,545	39,399	745,146	251	28,490	97,763	326,940	...
Norway	14	3,788,336	1,332,497	2,301,609	540	17,750	1,177,295	418,149	...
France	14	784,231	204,300	521,419	1,001	20,111	111,579	62,993	138,365
Russia	14	4,396,226	163,600	4,225,556	380,523	118,184	2,347,567	550,670	1,168
Africa									
Egypt	14	1,481,882	1,137,091	344,791	...	2,337	...	21,741	1,816
Ghana	14	331,534	38,545	292,989	...	951	...	32,278	80,444
Senegal	14	459,792	1,012	458,713	...	6,325	346	223,076	11,330
Nigeria	14	1,073,059	313,231	759,828	...	20,985	2,673	118,815	1,013
South Africa	14	615,673	6,160	596,302	...	212	144,069	371,450	6,813
Morocco	14	1,369,026	1,189	1,365,149	...	7,427	8,383	921,033	9,121
Oceania									
New Zealand	14	552,505	109,874	442,097	...	2,601	198,151	326	25,028

1.29 Production quantity of marine products (by species) (2)

(Unit: t)

(Unit: t)

Country (region)	Year	Marine products				
		Catching and gathering				
		Marine fishes/crustaceans/molluscs				Aquatic plants
		Crustaceans		Molluscs		
Crabs, sea-spiders etc.	Shrimps and prawns etc.	Squids, cuttlefishes, octopuses				
World	14	1,679,627	3,897,191	4,779,091	49,570,187	1,184,513
Asia						
Japan	14	30,838	16,727	245,906	1,855,433	91,500
Iran	14	1,860	8,609	6,177	289,189	...
India	14	54,774	393,981	80,225	3,303,958	...
Indonesia	14	86,692	277,842	174,608	3,978,469	70,514
South Korea	14	71,859	29,717	355,114	602,959	9,687
Cambodia	14	4,430	9,200	5,800	605,825	...
North Korea	14	...	...	11,500	144,700	...
Sri Lanka	14	...	...	4,140	264,953	...
Thailand	14	32,967	48,414	123,738	1,294,694	...
Taiwan	14	9,557	19,339	212,921	420,856	127
China	14	864,674	1,238,229	1,382,238	11,927,219	245,550
Turkey	14	6	4,420	1,361	108,120	...
Pakistan	14	5,879	19,620	9,762	322,333	...
Bangladesh	14	...	...	...	1,587,287	...
Philippines	14	29,888	41,190	61,252	1,200,768	367
Vietnam	14	30,203	383,597	314,675	2,108,061	...
Malaysia	14	13,489	108,440	88,856	1,092,479	...
Myanmar	14	...	53,800	...	4,018,270	...
North/South America						
USA	14	126,353	203,188	125,362	748,149	8,373
Argentina	14	27	127,323	168,845	179,528	...
Ecuador	14	1,561	9,304	18,146	247,813	...
Canada	14	105,242	224,580	66	207,099	14,360
Chile	14	5,844	4,758	178,905	501,204	417,331
Brazil	14	11,015	44,721	3,349	560,170	...
Peru	14	1,954	29,168	626,948	455,512	25,827
Mexico	14	35,406	75,555	74,588	553,298	8,484
Europe						
Iceland	14	...	9,559	57	367,389	18,427
UK	14	35,003	34,492	10,608	394,658	...
Italy	14	194	13,059	17,256	69,122	1,200
Netherlands	14	588	24,809	264	98,066	...
Spain	14	5,908	9,756	63,463	383,286	2,151
Denmark	14	293	12,488	36	278,885	...
Norway	14	6,515	16,232	6	665,122	154,230
France	14	11,501	4,651	15,697	155,521	58,512
Russia	14	36,236	12,124	111,099	667,985	7,070
Africa						
Egypt	14	2,498	10,210	2,781	303,408	...
Ghana	14	191	1,141	3,869	174,115	...
Senegal	14	482	7,073	8,242	201,839	67
Nigeria	14	4,656	29,487	498	581,701	...
South Africa	14	11	2,531	7,058	64,158	13,211
Morocco	14	551	9,942	78,978	329,714	2,688
Oceania						
New Zealand	14	301	3,579	15,171	196,940	534

Source: "World Statistics 2017," Ministry of Internal Affairs and Communications