

## VI. Energy and Electricity

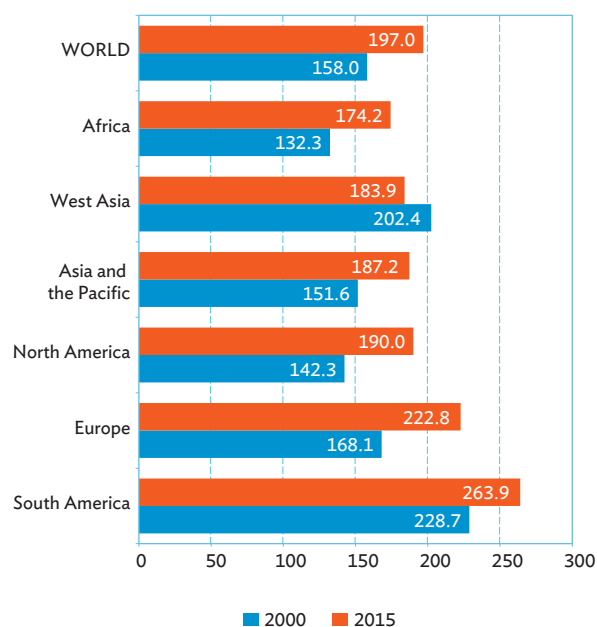
### Snapshot

- In 2015, Asia and the Pacific led the world by a wide margin in energy use, comprising 42.2% of the global total, compared to 29.4% in 2000.
- From 2000 to 2015, energy efficiency gains measured as the GDP per unit of energy used, were realized in 35 of 44 regional ADB member economies, while 9 economies experienced a decline.
- Energy production in Asia and the Pacific comprised 34.4% of the global total in 2015, up from 23.9% in 2000.
- As a share of domestic energy use, Timor-Leste (1,737.5%), Brunei Darussalam (490.4%), and Azerbaijan (310.0%) led all economies in energy exports in 2015.

**In 2015, Asia and the Pacific accounted for 42.2% of the global energy use, compared to 29.4% in 2000** (Table 2.6.3). The Peoples' Republic of China (PRC) accounted for more than half the energy use in Asia and the Pacific in 2015, up from 36.1% in 2000, and is the region's leading energy consumer. India, at 15.7%, accounted for the next largest share of energy use in Asia and the Pacific in 2015, up from 13.7% in 2000. Japan was next at 7.7% in 2015, down from 18.4% in 2000.

**From 2000 to 2015, energy efficiency gains were realized in 35 of 44 regional ADB member economies.** The average level of energy efficiency—measured as the amount of GDP per unit use of energy—in Asia and the Pacific rose from \$151.6 million per petajoule in 2000 to \$187.2 million per petajoule in 2015, compared with global averages of \$158.0 million and \$197.0 million, respectively (Figure 2.6.1). South America led all regions in terms of energy efficiency in 2015, with an average of \$263.9 million per petajoule use of energy, up from \$228.7 million in 2000. Africa trailed all regions in energy efficiency in both 2000 and 2015 at \$132.3 million per petajoule and \$174.2 million per petajoule, respectively.

**Figure 2.6.1: Gross Domestic Product per Unit of Energy Use**  
(constant 2011 \$ million PPP per PJ)



\$ = United States dollars, PPP = purchasing power parity, PJ = petajoule.

Sources: Table 2.6.3, Key Indicators for Asia and the Pacific 2018; and United Nations Statistics Division.

[Click here for figure data](#)

Among the 44 economies of Asia and the Pacific for which data were available, 35 increased their energy efficiency from 2000 to 2015, while 9 experienced a decline (Table 2.6.3). In the Pacific, 5 out of 11 economies recorded lower

output per unit use of energy in 2015 than in 2000. Most Pacific economies are highly dependent on imported petroleum for their energy requirements, making them vulnerable to price fluctuations in the international oil market (ADB 2011). In contrast with the economies in the Pacific, an overwhelming number of economies in Asia achieved energy efficiency gains during the review period: 9 of 10 in Central and West Asia, 3 of 4 (for which data were available) in East Asia, 5 of 6 in South Asia, and 9 of 10 in Southeast Asia. All three developed ADB member economies also achieved energy efficiency gains.

**The region's energy production comprised 34.4% of the global total in 2015, up from 23.9% in 2000.**

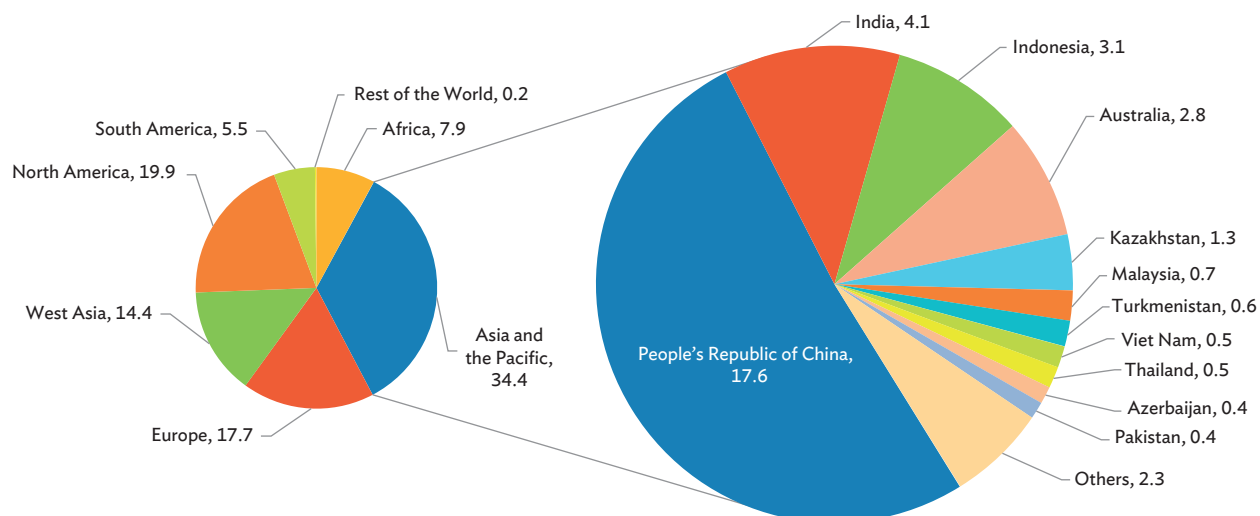
In 2015, Asia and the Pacific accounted for 34.4% of global energy production, up slightly from 33.9% in 2010, but a significant increase from 23.9% in 2000 (Figure 2.6.2, Table 2.6.4). The region's growing share of global energy production during the review period was due almost entirely to expanded production in the PRC, whose share of global energy production increased from 10.0% in 2000 to 17.6% in 2015.

As the largest energy producer in Asia and the Pacific, with a 51.2% share of regional production, the PRC remains dependent on combustible fuels as its main source of electricity generation, accounting for 73.7% in 2015 (the latest year for which data were available), though this is down from 82.4% in 2000 (Table 2.6.1).

The next largest energy producers in Asia and the Pacific, and their respective regional production shares in 2015, were India (12.0%), Indonesia (9.1%), and Australia (8.1%). Combustible fuels also comprised a majority share of electricity production in 2015 (the latest year for which data were available) in all three of these economies: India (85.5%), Indonesia (91.5%), and Australia (87.8%).

**As a share of domestic energy use, Timor-Leste (1,737.5%), Brunei Darussalam (490.4%), and Azerbaijan (310.0%) led all economies in energy exports in 2015.** The oil- and gas-rich economies of Timor-Leste, Brunei Darussalam, and Azerbaijan led the region in terms of energy exports as a share of domestic energy use in 2015 (Figure 2.6.3). Conversely, a number of Pacific island economies (the

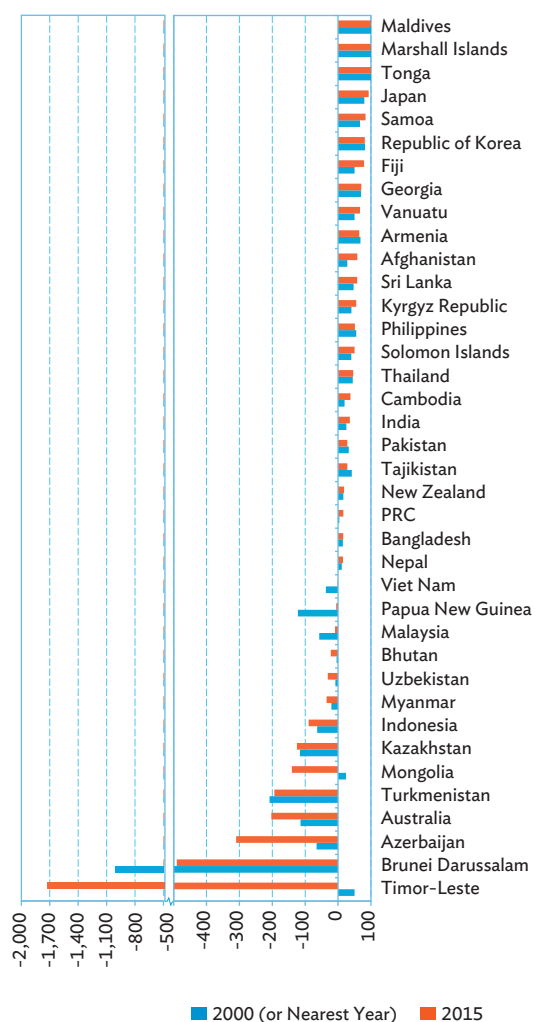
**Figure 2.6.2: Energy Production by Global Region and by Economy in Asia and the Pacific, 2015**  
(petajoules, %)



Sources: Table 2.6.4, Key Indicators for Asia and the Pacific 2018; and United Nations Statistics Division.

[Click here for figure data](#)

**Figure 2.6.3: Net Energy Imports as Share of Energy Use, 2000 and 2015 (%)**



PRC = People's Republic of China.

For Timor-Leste, data for earlier year is 2002 instead of 2000.

Source: Table 2.6.4, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

Cook Islands, the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, and Tonga) and Maldives were almost entirely dependent upon energy imports.

## Data Issues and Comparability

Energy data are compiled by the United Nations Statistics Division (UNSD) using standard procedures that follow the definitions of the United Nations International Recommendations for Energy Statistics.<sup>5</sup> The UNSD Annual Questionnaire on Energy Statistics to the UN member economies is the primary source of information. Additional sources of information for the UNSD energy database include national, regional, and international statistical publications. These include, but are not limited to, publications from the International Energy Agency, the Statistical Office of the European Communities (Eurostat), the International Atomic Energy Agency, the Organization of the Petroleum Exporting Countries, and the Organización Latinoamericana de Energía. The UNSD prepares estimates where official data are incomplete or inconsistent. For the indicator on GDP per unit use of energy, the energy statistics adopt the territory principle, while national accounts are being compiled on the residency principle, which could be a potential source of inconsistency, although in practice differences are not huge (UN 2016).

Data for the household electrification indicator are lacking. Data are posted over a varied range of years (i.e., different starting and ending years) depending on data availability. These data may therefore not be comparable, limiting possibilities for analysis.

<sup>5</sup> The full definitions can be found at <https://unstats.un.org/UNSD/energy/ires/default.htm>.

## Electricity

Table 2.6.1: Electricity Production and Sources

ADB Regional Member	Total Electricity Production (kWh billion)		Sources of Electricity (% of total)							
			Combustible fuels <sup>a</sup>		Hydropower		Solar		Others <sup>b</sup>	
	2000	2015	2000	2015	2000	2015	2000	2015	2000	2015
<b>Developing ADB Member Economies</b>										
<b>Central and West Asia</b>										
Afghanistan	0.7	1.1 (2016)	25.0	13.9 (2016)	75.0	86.1 (2016)	-	- (2016)	-	- (2016)
Armenia	6.0	7.3 (2016)	45.2	35.3 (2016)	21.2	32.1 (2016)	-	- (2016)	33.7	32.6 (2016)
Azerbaijan	18.7	24.7	91.8	93.3	8.2	6.6	-	0.0	-	0.0
Georgia	7.4	10.8	21.1	22.0	78.9	78.0	-	-	-	-
Kazakhstan	51.6	106.4	85.4	91.2	14.6	8.7	-	0.0	-	0.1
Kyrgyz Republic	16.0	13.0	14.4	14.8	85.6	85.2	-	-	-	-
Pakistan	65.8	115.1	70.1	65.2	29.3	29.5	-	-	0.6	5.3
Tajikistan	14.2	17.2	2.3	1.5	97.7	98.5	-	-	-	-
Turkmenistan	9.8	22.5	100.0	100.0	-	-	-	-	-	-
Uzbekistan	46.9	57.3	87.5	79.3	12.5	20.7	-	-	-	-
<b>East Asia</b>										
China, People's Republic of	1,355.6	5,814.6	82.4	73.7	16.4	19.4	-	0.7	1.2	6.2
Hong Kong, China	31.3	37.9	100.0	100.0	-	-	-	-	-	-
Korea, Republic of	290.1	552.9	60.5	67.8	1.9	1.0	0.0	0.7	37.6	30.4
Mongolia	2.9	5.7 (2016)	100.0	100.0 (2016)	-	- (2016)	-	- (2016)	-	- (2016)
Taipei, China	184.8	270.3 (2017)	...	...	...	...	...	...	...	...
<b>South Asia</b>										
Bangladesh	15.8	59.0	94.0	98.8	6.0	1.0	-	0.3	-	0.0
Bhutan	1.8	7.7	0.0	0.0	100.0	100.0	-	-	-	-
India	560.8	1,354.4	83.4	85.5	13.3	9.0	-	0.5	3.3	5.0
Maldives	0.1	0.4	100.0	98.7	-	-	-	1.3	-	-
Nepal	1.7	3.5	1.6	0.0	98.4	99.8	-	0.0	-	0.2
Sri Lanka	7.0	13.2	54.0	51.8	46.0	45.1	0.0	0.4	0.0	2.6
<b>Southeast Asia</b>										
Brunei Darussalam	2.8	4.2	100.0	100.0	-	-	-	0.0	-	-
Cambodia	0.3	4.4	85.9	54.4	14.1	45.5	-	0.1	-	-
Indonesia	99.5	263.1	83.5	91.5	13.8	6.7	-	0.0	2.7	1.8
Lao People's Democratic Republic	4.0	16.5	9.1	13.6	90.9	86.4	-	-	-	-
Malaysia	69.2	150.1	89.3	90.0	10.7	9.3	-	0.2	-	0.5
Myanmar	5.1	16.0	63.0	40.5	37.0	59.5	-	-	-	-
Philippines	45.3	90.8 (2016)	57.1	76.6 (2016)	17.2	8.9 (2016)	-	1.2 (2016)	25.6	13.3 (2016)
Singapore	31.7	50.3	100.0	100.0	-	-	-	-	-	-
Thailand	106.1	177.8	94.3	95.8	5.7	2.7	-	1.3	0.0	0.2
Viet Nam	26.6	174.9 (2016)	45.2	62.3 (2016)	54.8	37.6 (2016)	-	- (2016)	-	0.1 (2016)
<b>The Pacific</b>										
Cook Islands	0.0	0.0 (2016)	100.0	89.2 (2016)	-	- (2016)	-	10.8 (2016)	-	- (2016)
Fiji	0.7	0.9 (2016)	39.8	46.6 (2016)	60.2	53.0 (2016)	-	- (2016)	-	0.4 (2016)
Kiribati	0.0	0.0	100.0	92.7	-	-	-	7.3	-	-
Marshall Islands	0.1	0.1	100.0	99.8	-	-	-	0.2	-	-
Micronesia, Federated States of	0.1	0.1	99.8	98.4	-	0.1	0.2	1.5	-	-
Nauru	0.0	0.0	100.0	99.6	-	-	-	0.4	-	-
Palau	0.1	0.1	100.0	100.0	-	-	-	-	-	-
Papua New Guinea	2.4	4.2	52.9	65.5	39.2	24.4	-	-	7.8	10.1
Samoa	0.1	0.1	50.4	69.6	49.6	24.2	-	6.0	-	0.1
Solomon Islands	0.1	0.1 (2016)	100.0	97.9 (2016)	-	- (2016)	-	2.1 (2016)	-	- (2016)
Timor-Leste	0.1 (2002)	0.4	100.0 (2002)	100.0	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)
Tonga	0.0	0.1 (2016)	100.0	92.1 (2016)	-	- (2016)	-	7.8 (2016)	-	0.0 (2016)
Tuvalu	0.0	0.0	100.0	71.8	-	-	-	28.2	-	-
Vanuatu	0.0	0.1 (2016)	100.0	79.5 (2016)	-	9.9 (2016)	-	2.8 (2016)	-	7.8 (2016)
<b>Developed ADB Member Economies</b>										
Australia	210.2	252.4	92.0	87.8	8.0	5.3	0.0	2.4	0.0	4.5
Japan	1,099.7	1,041.3	61.6	86.1	8.8	8.8	0.0	3.4	29.6	1.6
New Zealand	39.2	44.2	29.8	21.2	62.3	55.5	-	0.1	7.9	23.2

... = data not available, - = magnitude equals zero, 0.0 = magnitude is less than half of unit employed, ADB = Asian Development Bank, kWh = kilowatt-hour.

- a Electricity from combustible fuels refers to the production of electricity from the combustion of fuels that are capable of igniting or burning, which would include coal, natural gas, oil, and other combustible fuels.  
b Includes chemical heat, geothermal, nuclear, tide, other marine electricity, wind, wave, and other sources of energy.

Sources: United Nations. Energy Statistics Database. <http://data.un.org/Explorer.aspx?d=EDATA> (accessed 19 July 2018). For Taipei, China: Government of Taipei, China; Directorate-General of Budget, Accounting and Statistics; Official communication, 7 June 2018.

Table 2.6.2: Electric Power Consumption and Electrification

ADB Regional Member	Electric Power Consumption (kWh per capita)		Household Electrification Rate (% of households)	
	2000	2015	2000	2016
<b>Developing ADB Member Economies</b>				
<b>Central and West Asia</b>				
Afghanistan	31	126 (2016)	...	71.5 (2015)
Armenia	1,170	1,840	98.9	100.0
Azerbaijan	1,914	2,132	99.5 (2006)	...
Georgia	1,423	2,669	...	...
Kazakhstan	2,773	4,221	...	...
Kyrgyz Republic	1,891	1,790	...	99.8 (2012)
Pakistan	329	489	89.2 (2006)	93.6 (2012)
Tajikistan	2,146	1,464	...	99.1 (2012)
Turkmenistan	1,526	2,648	99.6	...
Uzbekistan	1,669	1,536	99.7 (2002)	...
<b>East Asia</b>				
China, People's Republic of	993	3,689	...	...
Hong Kong, China	5,446	6,023	...	...
Korea, Republic of	5,597	9,931	...	...
Mongolia	970	1,799 (2016)	67.3	...
Taipei, China	7,956	11,096 (2017)	...	...
<b>South Asia</b>				
Bangladesh	95	301	32.0	62.4 (2014)
Bhutan	696	2,613	41.1 (2003)	...
India	301	790	67.9 (2006)	88.2 (2015)
Maldives	325	835	...	99.8 (2009)
Nepal	55	136	24.6 (2001)	76.3 (2011)
Sri Lanka	290	560	...	...
<b>Southeast Asia</b>				
Brunei Darussalam	7,559	8,950	...	...
Cambodia	29	321	16.6	56.1 (2014)
Indonesia	374	827 (2016)	90.7 (2003)	96.0 (2012)
Lao People's Democratic Republic	120	636	46.3 (2002)	...
Malaysia	2,638	4,303	...	...
Myanmar	71	256	...	55.6
Philippines	469	718 (2016)	76.6 (2003)	87.5 (2013)
Singapore	7,233	8,584	...	...
Thailand	1,558	2,547	...	...
Viet Nam	283	1,690 (2016)	89.1 (2002)	...
<b>The Pacific</b>				
Cook Islands	1,389	1,703 (2016)	97.0 (2006)	99.5
Fiji	749	937 (2016)	...	84.0 (2009)
Kiribati	169	174	...	92.6 (2015)
Marshall Islands	1,476	1,415	...	90.0 (2011)
Micronesia, Federated States of	705	494	46.0	65.0 (2010)
Nauru	2,989	1,844	100.0 (2002)	100.0 (2011)
Palau	4,464	3,476	99.0 (2005)	98.3 (2015)
Papua New Guinea	409	463	...	19.5 (2010)
Samoa	515	600	98.0 (2006)	96.4
Solomon Islands	139	149 (2016)	14.0 (2005)	21.0 (2013)
Timor-Leste	52 (2002)	205	...	38.0 (2009)
Tonga	369	498 (2016)	89.0 (2006)	92.0 (2011)
Tuvalu	308	645	94.0 (2005)	97.3
Vanuatu	224	241 (2016)	...	57.8
<b>Developed ADB Member Economies</b>				
Australia	9,390	9,436	...	...
Japan	7,735	7,573	...	...
New Zealand	9,016	8,669	...	...

... = data not available, ADB = Asian Development Bank, kWh = kilowatt-hour.

Sources: For electric power consumption: United Nation's Energy Statistics Database. <http://data.un.org/Explorer.aspx?d=EDATA> (accessed 24 July 2018). For Taipei, China: Asian Development Bank estimates using economy source. For household electrification rate: International Development Association. Results Measurement System Online. <http://data.worldbank.org/data-catalog/IDA-results-measurement> (accessed 12 June 2018); United States Agency for International Development, Demographic and Health Surveys Program. The DHS Program STAT compiler. <http://www.statcompiler.com/> (accessed 12 June 2018); and Secretariat of the Pacific Community, Pacific Regional Information System. National Minimum Development Indicators. <http://www.spc.int/nmdi/MdiHome.aspx> (accessed 12 June 2018).

[Click here for table data](#)

## Energy

Table 2.6.3: Use of Energy

ADB Regional Member	Energy Use (PJ)				GDP per Unit Use of Energy (constant 2011 \$ million PPP per PJ)			
	2000	2005	2010	2015	2000	2005	2010	2015
<b>Developing ADB Member Economies</b>								
<b>Central and West Asia</b>								
Afghanistan	32 <sup>a</sup>	36	137	145	730.6 <sup>a</sup>	791.2	339.4	420.9
Armenia	84	105	119	129	106.9	152.1	162.1	185.3
Azerbaijan	485	573	486	603	74.0	117.9	297.2	267.2
Georgia	93	135	140	197	155.1	152.1	188.8	170.3
Kazakhstan	1,560	2,352	3,363	3,258	94.9	103.1	97.5	126.7
Kyrgyz Republic	101	114	115	167	100.6	107.3	132.2	115.5
Pakistan	2,082	2,642	3,095	3,360	232.5	233.8	236.1	264.7
Tajikistan	91	99	94	114	80.6	118.2	171.2	198.0
Turkmenistan	625	805	951	1,160	38.5	38.4	53.2	71.9
Uzbekistan	2,130	2,050	1,809	1,783	29.0	39.2	66.9	100.1
<b>East Asia</b>								
China, People's Republic of	42,461	68,833	101,618	119,926	110.0	108.3	125.4	155.2
Hong Kong, China	570	579	550	583	397.8	481.5	614.4	670.3
Korea, Republic of	7,854	8,764	10,441	11,364	124.2	140.3	144.1	153.4
Mongolia	87	104	164	272	128.3	146.9	127.5	124.9
Taipei, China	...	...	...	...	...	...	...	...
<b>South Asia</b>								
Bangladesh	1,001	1,189	1,489	1,789	215.8	232.8	249.6	282.3
Bhutan	44	48	59	63	46.1	61.9	79.2	96.8
India	16,135	22,809	28,903	36,697	162.8	159.5	187.6	205.3
Maldives	7 <sup>b</sup>	9	13	19	379.8 <sup>b</sup>	328.5	336.6	301.8
Nepal	349	388	446	505	104.7	111.3	120.3	131.3
Sri Lanka	296	324	360	433	351.6	390.3	478.6	535.6
<b>Southeast Asia</b>								
Brunei Darussalam	73	76	136	114	374.6	398.6	230.2	273.2
Cambodia	142	144	223	295	117.8	181.5	161.9	173.1
Indonesia	4,970	7,087	8,330	9,452	247.1	218.3	245.5	283.2
Lao People's Democratic Republic	70	76	119	187	189.2	235.8	221.4	205.1
Malaysia	1,958	2,717	2,965	3,424	193.1	175.4	200.1	224.3
Myanmar	538	619	663	846	111.9	178.2	281.5	313.2
Philippines	1,551	1,469	1,631	2,050	212.4	280.7	321.6	341.1
Singapore	756	805	1,109	1,233	275.4	328.4	330.1	363.1
Thailand	3,075	4,067	4,945	5,412	188.1	185.4	183.3	193.3
Viet Nam	1,262	1,756	2,319	2,994	163.0	163.5	168.2	173.6
<b>The Pacific</b>								
Cook Islands	1	1	1	1	...	...	...	...
Fiji	22	24	22	38	246.1	254.3	287.4	199.0
Kiribati	1 <sup>a</sup>	1	1	1	173.2 <sup>a</sup>	182.4	177.7	221.1
Marshall Islands	2	2	2	2	75.5	84.2	91.2	97.1
Micronesia, Federated States of	2	2	2	2	167.5	172.8	170.8	170.8
Nauru	1	1 <sup>c</sup>	1	1	...	39.8 <sup>c</sup>	66.1	153.1
Palau	3	3	3	3	87.3	98.7	84.7	106.3
Papua New Guinea	99	126	141	159	154.5	135.1	160.9	192.6
Samoa	3	4	5	6	251.8	240.0	201.1	179.5
Solomon Islands	5	6	6	6	142.7	125.3	156.8	201.1
Timor-Leste	4 <sup>a</sup>	4	4	8	277.5	294.5	379.5	274.7
Tonga	1	2	2	2	451.3	249.9	259.5	276.0
Tuvalu	0	0	0	0	...	...	...	...
Vanuatu	2	2	3	3	261.2	273.2	232.2	247.6
<b>Developed ADB Member Economies</b>								
Australia	26,958	27,283	27,126	24,191	188.5	200.9	207.6	248.8
Japan	4,540	4,762	5,431	5,261	148.8	166.4	167.9	198.2
New Zealand	21,671	21,774	20,862	17,984	198.3	209.2	219.5	267.8
	747	747	833	946	146.0	177.4	168.5	168.3
<b>DEVELOPING ADB MEMBER ECONOMIES<sup>d</sup></b>	<b>90,584</b>	<b>130,951</b>	<b>176,985</b>	<b>208,806</b>	<b>140.6</b>	<b>138.6</b>	<b>154.1</b>	<b>180.1</b>
<b>ADB REGIONAL MEMBER ECONOMIES<sup>d</sup></b>	<b>117,542</b>	<b>158,234</b>	<b>204,111</b>	<b>232,997</b>	<b>151.6</b>	<b>149.4</b>	<b>161.2</b>	<b>187.2</b>
<b>WORLD</b>	<b>400,355</b>	<b>463,007</b>	<b>517,219</b>	<b>551,616</b>	<b>158.0</b>	<b>164.7</b>	<b>176.6</b>	<b>197.0</b>

... = data not available, 0 = magnitude is less than half of unit employed, \$ = United States dollars, ADB = Asian Development Bank, GDP = gross domestic product, PPP = purchasing power parity, PJ = petajoule.

a For 2000, data are for 2002.

b For 2000, data are for 2001.

c For 2005, data are for 2007.

d Only for reporting economies with data corresponding to the year heading.

Sources: For energy use: United Nations Statistics Division. Official communication, 25 July 2018. For GDP per unit use of energy: Asian Development Bank estimates.

[Click here for table data](#)

Table 2.6.4: Energy Production and Imports

ADB Regional Member	Energy Production (PJ)				Energy Imports, Net (% of energy use)			
	2000	2005	2010	2015	2000	2005	2010	2015
<b>Developing ADB Member Economies</b>								
<b>Central and West Asia</b>								
Afghanistan	18	23	41	60	28.0	36.1	70.1	58.6
Armenia	27	36	52	46	67.9	65.7	56.3	64.3
Azerbaijan	803	1,155	2,759	2,472	-65.6	-101.6	-467.7	-310.0
Georgia	28	53	58	58	69.9	60.7	58.6	70.6
Kazakhstan	3,367	5,131	6,770	7,338	-115.8	-118.2	-101.3	-125.2
Kyrgyz Republic	60	61	53	75	40.6	46.5	53.9	55.1
Pakistan	1,403	2,020	2,255	2,415	32.6	23.5	27.1	28.1
Tajikistan	53	66	65	82	41.8	33.3	30.9	28.1
Turkmenistan	1,928	2,584	1,982	3,407	-208.5	-221.0	-108.4	-193.7
Uzbekistan	2,307	2,446	2,309	2,344	-8.3	-19.3	-27.6	-31.5
<b>East Asia</b>								
China, People's Republic of	40,783	63,831	88,642	100,864	4.0	7.3	12.8	15.9
Hong Kong, China	...	...	...	...	...	...	...	...
Korea, Republic of	1,420	1,776	1,855	2,116	81.9	79.7	82.2	81.4
Mongolia	66	138	655	654	24.1	-32.7	-299.4	-140.4
Taipei, China	...	...	...	...	...	...	...	...
<b>South Asia</b>								
Bangladesh	857	1,027	1,304	1,509	14.4	13.6	12.4	15.7
Bhutan	46	53	73	77	-4.5	-10.4	-23.7	-22.2
India	12,090	18,315	22,598	23,538	25.1	19.7	21.8	35.9
Maldives	0	0	0	0	100.0	100.0	100.0	100.0
Nepal	310	349	384	430	11.2	10.1	13.9	14.9
Sri Lanka	156	163	184	181	47.3	49.7	48.9	58.2
<b>Southeast Asia</b>								
Brunei Darussalam	813	848	775	673	-1,013.7	-1,015.8	-469.9	-490.4
Cambodia	114	105	152	184	19.7	27.1	31.8	37.6
Indonesia	8,129	11,351	16,854	17,926	-63.6	-60.2	-102.3	-89.7
Lao People's Democratic Republic	70	73	117	185	0.0	3.9	1.7	1.1
Malaysia	3,082	3,770	3,450	3,748	-57.4	-38.8	-16.4	-9.5
Myanmar	648	927	969	1,141	-20.4	-49.8	-46.2	-34.9
Philippines	695	762	924	999	55.2	48.1	43.3	51.3
Singapore	...	...	25	28	...	...	97.7	97.7
Thailand	1,700	2,144	2,952	2,929	44.7	47.3	40.3	45.9
Viet Nam	1,733	2,612	2,747	3,043	-37.3	-48.7	-18.5	-1.6
<b>The Pacific</b>								
Cook Islands	...	...	...	0	...	...	...	100.0
Fiji	11	9	6	8	50.0	62.5	72.7	78.9
Kiribati	0	0	0	0	...	100.0	100.0	100.0
Marshall Islands	0	0	0	0	100.0	100.0	100.0	100.0
Micronesia, Federated States of	0	0	0	0	100.0	100.0	100.0	100.0
Nauru	...	...	0	0	...	...	100.0	100.0
Palau	...	...	...	...	...	...	...	...
Papua New Guinea	220	174	95	168	-122.2	-38.1	32.6	-5.7
Samoa	1	2	2	1	66.7	50.0	60.0	83.3
Solomon Islands	3	3	3	3	40.0	50.0	50.0	50.0
Timor-Leste	2 <sup>a</sup>	201	186	147	50.0 <sup>a</sup>	-4,925.0	-4,550.0	-1,737.5
Tonga	0	0	0	0	100.0	100.0	100.0	100.0
Tuvalu	...	...	...	0	...	...	...	...
Vanuatu	1	1	1	1	50.0	50.0	66.7	66.7
<b>Developed ADB Member Economies</b>								
Australia	14,743	16,198	18,508	17,982	-114.3	-140.5	-150.8	-202.9
Japan	9,731	11,451	13,620	15,938	79.8	80.8	80.3	92.9
New Zealand	4,384	4,175	4,118	1,269	15.9	23.4	7.6	18.1
	628	572	770	775				
<b>DEVELOPING ADB MEMBER ECONOMIES<sup>b</sup></b>	<b>82,944</b>	<b>122,209</b>	<b>161,297</b>	<b>178,850</b>				
<b>ALL ADB REGIONAL MEMBERS<sup>b</sup></b>	<b>97,685</b>	<b>138,407</b>	<b>179,805</b>	<b>196,832</b>				
<b>WORLD</b>	<b>408,238</b>	<b>476,469</b>	<b>530,321</b>	<b>572,353</b>				

... = data not available, 0 = magnitude is less than half of unit employed, ADB = Asian Development Bank, PJ = petajoule.

a For 2000, data are for 2002.

b Only for reporting economies with data corresponding to year heading.

Sources: For energy production: United Nations Statistics Division. Official communication, 25 July 2018. For net energy imports: Asian Development Bank estimates.

[Click here for table data](#)

## Energy

**Table 2.6.5: Retail Prices of Fuel Energy**  
(\$/L)

ADB Regional Member	Gasoline (Premium)				Diesel			
	2000	2005	2010	2017	2000	2005	2010	2017
<b>Developing ADB Member Economies</b>								
<b>Central and West Asia</b>								
Afghanistan	...	...	...	...	...	...	...	...
Armenia	0.51	0.73	1.01	0.78 (2016)	0.34	0.60	0.92	0.72 (2016)
Azerbaijan	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...
Kazakhstan	0.35	0.47	0.58	0.49	0.30	0.39	0.53	0.49
Kyrgyz Republic	...	...	...	...	...	...	...	...
Pakistan	0.48	0.82	0.80	0.73 (2016)	0.22	0.54	0.83	0.77 (2016)
Tajikistan	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...
Uzbekistan	0.44	0.33 (2004)	...	...	...	...	...	...
<b>East Asia</b>								
China, People's Republic of	...	...	...	...	...	...	...	...
Hong Kong, China	1.32	1.60	1.75	1.80	0.80	1.00	1.25	1.53
Korea, Republic of	1.10	1.40	1.48	1.32	0.54	1.05	1.30	1.13
Mongolia	0.33	0.56	1.01	0.61	0.38	0.81 (2006)	0.96	0.98
Taipei, China	0.57	0.73	0.94	0.80	0.41	0.59	0.82	0.73
<b>South Asia</b>								
Bangladesh	...	...	...	...	...	...	...	...
Bhutan	...	...	...	...	...	...	...	...
India	0.58	0.86	1.05	...	0.32	0.64	0.83	...
Maldives	...	...	...	...	...	...	...	...
Nepal	0.58	0.87	1.22	...	0.33	0.58	0.95	...
Sri Lanka	0.65	0.80	1.02	0.77	0.32	0.50	0.65	0.62
<b>Southeast Asia</b>								
Brunei Darussalam	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...
Indonesia	0.14	0.30	0.50	0.60 (2016)	0.07	0.27	0.50	...
Lao People's Democratic Republic	...	...	...	...	...	...	...	...
Malaysia	0.29	0.40	0.67	0.55 (2016)	0.18	0.29	0.57	0.45 (2016)
Myanmar	...	1.84 (2007)	1.41	0.76 (2015)	...	1.62 (2007)	1.37	0.80 (2015)
Philippines	0.37	0.57	0.96	0.91	0.28	0.51	0.76	0.63
Singapore	0.81	0.83 (2004)	...	...	0.33	0.56	0.89	0.97
Thailand	0.39	0.59	1.12 (2009)	...	0.32	0.50	0.90	0.76
Viet Nam	...	...	0.99 (2011)	0.85 (2015)	...	...	0.93 (2011)	0.68 (2015)
<b>The Pacific</b>								
Cook Islands	...	...	...	...	...	...	...	...
Fiji	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...
Micronesia, Federated States of	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...
Vanuatu	0.78	1.23	1.50	...	...	...	...	...
<b>Developed ADB Member Economies</b>								
Australia	0.49	0.82	1.09	0.89	...	0.87	1.09	0.88
Japan	1.05	1.23	1.64	1.29	0.76	0.91	1.28	1.00
New Zealand	0.51	0.97	1.34	1.45	0.33	0.64	0.85	0.84

... = data not available, \$ = United States dollars, ADB = Asian Development Bank, L = liter.

Source: Economy sources.

[Click here for table data](#)