

Japan

Energy Efficiency/CO ₂ ¹ Indicators	Units	1980	1990	2000	⁴ 2008
Key indicators					
Primary energy intensity (at purchasing power parities (ppp))	koe/\$05p	0.158	0.136	0.143	0.126
Primary energy intensity excluding traditional fuels (ppp)	koe/\$05p	0.158	0.135	0.142	0.125
Primary energy intensity adjusted to EU structure (ppp)	koe/\$05p	0.116	0.110	0.113	0.098
Final energy intensity (at ppp)	koe/\$05p	0.100	0.086	0.087	0.077
Final energy intensity at 2005 GDP structure ³ (ppp)	koe/\$05p	0.094	0.082	0.086	0.076
Final energy intensity adjusted to EU economic structure (ppp)	koe/\$05p	0.085	0.077	0.079	0.070
Ratio final/primary intensity	%	71.5	72.7	70.0	70.5
CO ₂ intensity (at ppp)	kCO ₂ /\$05p	n.a.	0.318	0.312	0.292
CO ₂ emissions per capita	tCO ₂ /cap	n.a.	8.26	8.92	9.19
Industry					
Energy intensity of industry (to value added) (at ppp)	koe/\$05p	0.133	0.095	0.095	0.086
Energy intensity of manufacturing (at ppp)	koe/\$05p	0.191	0.139	0.133	0.119
Energy intensity of chemicals industry (at ppp)	koe/\$05p	0.278	0.202	0.191	0.196
Unit consumption of steel	toe/t	0.39	0.36	0.37	0.39
Share of electric process in steel production	%	24.5	31.4	28.8	24.8
Share of industrial cogeneration in power generation	%	0	0	0	0
CO ₂ intensity of industry ² (to value added) (at ppp)	kCO ₂ /\$05p	n.a.	0.254	0.276	0.261
CO ₂ emissions of industry ² per capita	tCO ₂ /cap	n.a.	2.44	2.55	2.55
Transport					
Energy intensity of transport to GDP (at ppp)	koe/\$05p	0.024	0.022	0.024	0.019
Average consumption of road transport per equivalent car	toe/car equiv.	1.48	0.48	0.56	0.54
Unit consumption of goods per ton km	toe/tkm	0.11	0.09	0.09	0.08
Share of biofuels in road transport energy consumption	%	0	0	0	0
CO ₂ intensity of transport to GDP (at ppp)	kCO ₂ /\$05p	n.a.	0.065	0.070	0.056
CO ₂ emissions of transport per capita	tCO ₂ /cap	n.a.	1.69	2.00	1.77
Households					
Average electricity consumption of households per capita	kWh/cap	994	1491	2032	2318
Average electricity consumption of electrified households	kWh/hh	3498	4749	5716	5960
Households consumption for electrical appliances and lighting	kWh/hh	2605	4041	4863	5070
Per capita installed capacity of solar water heaters	m ² /1000inhab	44.9	48.1	52.3	56.4
CO ₂ emissions of residential sector per household	tCO ₂ /hh	n.a.	1.45	1.53	1.26
Services					
Energy intensity of service sector (to value added) (at ppp)	koe/\$05p	0.016	0.023	0.026	0.024
Electricity intensity of service sector (to value added) (at ppp)	kWh/k\$05p	40	108	128	139
Unit consumption of services per employee	toe/emp	0.66	1.24	1.48	1.44
Unit electricity consumption of services per employee	kWh/emp	1712	5694	7262	8226
CO ₂ intensity of service sector (to value added) (at ppp)	kCO ₂ /\$05p	n.a.	0.041	0.042	0.031
CO ₂ emissions of service sector per employee	tCO ₂ /emp	n.a.	2.16	2.38	1.90
Agriculture					
Energy intensity of agriculture (to value added) (at ppp)	koe/\$05p	0.051	0.090	0.083	0.076
CO ₂ intensity of agriculture (to value added) (at ppp)	kCO ₂ /\$05p	n.a.	0.271	0.243	0.221
CO ₂ emissions of agriculture sector per capita	tCO ₂ /cap	n.a.	0.17	0.12	0.09
Transformation sector					
Efficiency of total electricity generation	%	42.9	42.5	41.9	43.4
Rate of electricity transmission-distribution losses	%	5.6	6.0	5.6	5.7
Efficiency of thermal power plants	%	40.0	42.6	43.9	44.9
Share of renewables in electricity generating capacity	%	21.0	19.8	19.0	19.0
Share of renewables in gross electricity consumption	%	16.1	12.8	10.9	9.2

¹ CO₂ from fuel combustion

² incl. autoproducers

³ by main sector

⁴ Italic = 2007

GDP / PRICES	Units	1980	1990	2000	2008
GDP per capita (at ppp)	\$05p/cap	18652	25953	28613	31484
Average electricity price (at ppp)	c05p/kWh	21.5	16.8	14.1	13.4
Average price of motor fuels (at ppp)	\$05p/l	1.42	0.89	0.72	1.15