

Industry Trends in Relation to CO2 Emissions

(In 10,000t-CO2)

Industry(=with a target in terms of CO2 emissions)	Fiscal 1990	Fiscal 1997	Fiscal 1998	Fiscal 1999	Fiscal 2000	Fiscal 2001	Fiscal 2002	Compared to fiscal 1990(%)	Compared to fiscal 2000(%)
1 Federation of Electric Power Companies (Portion attributed to industry:these figures are used in the calculation of the 35-industry totals below)	27,700	29,200	28,500	30,700	31,700	31,200	34,200	23.5%	9.6%
	3,100	3,380	3,240	3,360	3,430	3,370	3,780	21.9%	12.2%
2 Petroleum Association of Japan	3,300	4,381	4,322	4,378	4,364	4,383	4,340	31.5%	-1.0%
3 Japan Gas Association()	116	95	91	89	84	77	84	-27.8%	9.2%
4 Japan Iron and Steel Federation	19,483	19,502	18,426	18,870	18,227	17,795	18,133	-6.9%	1.9%
5 Japan Chemical Industry Association	7,058	7,707	7,474	7,829	7,862	7,500	7,672	8.7%	2.3%
6 Cement Association of Japan	2,743	2,781	2,480	2,465	2,474	2,376	2,249	-18.0%	-5.3%
7 Japan Paper Association	2,453	2,556	2,515	2,540	2,640	2,604	2,626	7.0%	0.8%
8 Communications Industry Association of Japan Japan Electronics and Information Technology Industry Association Japan Electric Manufacturers Association Japan Business Machine and Information System Industries	1,181	1,441	1,314	1,389	1,460	1,398	1,517	28.5%	8.5%
9 Japan Federation of Construction Contractors	923	892	876	718	704	660	643	-30.4%	-2.6%
10 Japan Automobile Manufacturers Association()	759	694	661	639	624	585	595	-21.5%	1.8%
11 Japan Auto Parts Industries Association()	725	708	668	678	657	643	701	-3.4%	9.0%
12 Japan Mining Industry Association	488	484	482	495	506	503	502	3.0%	-0.2%
13 Japan Federation of Housing Organizations()	407	442	429	444	425	425	416	2.3%	-2.1%
14 Japan Lime Association	284	219	195	209	215	192	209	-26.5%	9.0%
15 The Japan Rubber Manufacturers Association()	184	182	179	185	182	176	189	2.7%	7.7%
16 Flat Glass Association	178	164	145	138	135	137	133	-25.4%	-3.2%
17 Japan; Japan Pharmaceutical manufacturers Association()	159	194	195	210	209	209	213	33.8%	1.6%
18 Japan Aluminum Association	149	162	152	161	163	155	162	9.3%	4.6%
19 Brewers Association of Japan()	110	119	114	111	105	102	97.7	-11.5%	-4.1%
20 Japan Electric Wire and Cable Makers' Association	100	93.3	87.7	88.2	92.4	85.9	85.2	-14.9%	-0.8%
21 Japan Auto-body Industries Association, Inc.()	92.6	84.9	83.1	85.4	90.0	90.9	95.1	2.7%	4.6%
22 Japan Dairy Industry Association	85.7	95.8	98.3	102	102	105	114	32.5%	8.4%
23 Japan Society of Industrial Machinery Manufacturers	67.3	60.5	55.7	55.3	57.6	55.4	57.2	-14.9%	3.3%
24 Japan Brass Makers Association	65.8	57.5	50.9	54.4	56.7	45.5	49.4	-25.0%	8.4%
25 Japan Bearing Industrial Association	64.0	59.1	53.9	55.1	59.9	55.4	60.5	-5.4%	9.2%
26 Japan Sugar Refiners' Association()	58.2	49.3	47.7	47.9	49.6	49.3	46.3	-20.5%	-6.0%
27 Japan Coal Energy Center	57.0	17.8	17.8	17.9	18.0	14.6	4.3	-92.5%	-70.8%
28 Japan Sanitary Equipment Industry Association()	47.9	41.6	34.9	35.6	36.5	37.3	35.4	-26.0%	-4.9%
29 The Japan Soft Drinks Association	46.0	65.6	67.8	73.9	80.2	83.4	86.7	88.5%	3.9%
30 Limestone Association of Japan	45.4	42.0	39.9	40.6	41.7	41.3	39.1	-14.0%	-5.3%
31 Japan machine Tool Builders' Association	23.1	20.9	22.9	20.1	20.7	19.5	18.4	-20.1%	-5.4%
32 Flour Millers Association	17.0	18.7	18.1	18.7	19.2	19.0	20.4	19.8%	7.2%
33 The Shipbuilders' Association of Japan; The Cooperative Association of Japan Shipbuilders	15.0	19.2	18.0	18.7	18.3	18.2	24.2	61.1%	33.1%
34 Japan Industry Vehicles Association()	6.1	6.1	5.7	6.2	6.1	5.4	5.8	-5.8%	7.2%
35 Japan Association of Rolling Stock Industries()	4.3	3.4	3.2	3.3	3.2	3.2	3.0	-31.1%	-6.1%
Emissions from Industrial Process	6,294	5,914	5,340	5,324	5,370	5,190	5,018		
Revisions(Note2)	-95	-330	-337	-260	-256	-245	-173		
Total CO2 emissions	50,795	52,423	49,668	50,693	50,332	48,964	49,851	-1.9%	1.8%
Average CO2 emissions in the past 6 years					50,322				

Note1: "Emissions from industrial processes" refers to CO2 emitted by non-energy sources in the course of the manufacturing process

Note2: Total CO2 emissions for the 35 industries are calculated on the basis of "generating end" electric power input per unit output for the respective industries on a fiscal year basis. On the other hand, in follow-up surveys, industries may also choose to report emissions in terms of "demand end" electric power input per unit output or fixed (the ratio in fiscal 1990) electric power input per unit output (have the Japan Gas Association, Japan Iron and Steel Federation, Communications Industry Association of Japan, Japan Electronics and Information Technology Industry Association, Japan Electric manufacturers Association, Japan Business Machine and Information System Industries Association, Japan Automobile manufacturers Association, Japan Coal Energy Center). The figures for CO2 emissions by industry in the table are the latter figures. The differences between these follow-up figures and the figures used to calculate the 35-industry totals are shown in the row of Revisions

Note3: Due to a revision of the Caloric Value Table, calculations of emissions from FY2000 on are based on different heat conversion coefficients from those used through FY1999