

部門別CO₂排出量【電気・熱配分前】(簡約表)

< 確報値 >

■ 排出量 [kt CO₂]

排出源	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
エネルギー起源	1,067,572	1,170,300	1,157,360	1,188,991	1,197,298	1,193,442	1,200,521	1,178,718	1,214,489	1,147,021	1,087,132	1,137,030	1,187,985	1,227,315	1,235,197	1,186,522	1,147,248	1,129,162	1,110,910
エネルギー・転換部門	348,412	374,920	365,842	391,423	407,747	403,780	423,927	414,871	467,189	436,557	397,682	422,047	479,362	524,907	524,965	498,449	473,249	505,685	491,041
製油所・発電所等	348,412	374,920	365,842	391,423	407,747	403,780	423,927	414,871	467,189	436,557	397,682	422,047	479,362	524,907	524,965	498,449	473,249	505,685	491,041
石炭製品製造	26,046	15,846	15,719	14,957	14,471	14,752	17,479	18,058	17,767	17,366	17,086	17,701	16,554	16,000	14,037	13,912	13,318	13,549	13,437
石油製品製造	26,046	15,846	15,719	14,957	14,471	14,752	17,479	18,058	17,767	17,366	17,086	17,701	16,554	16,000	14,037	13,912	13,318	13,549	13,437
石炭製品製造	26,046	15,846	15,719	14,957	14,471	14,752	17,479	18,058	17,767	17,366	17,086	17,701	16,554	16,000	14,037	13,912	13,318	13,549	13,437
ガス製品製造	1,102	837	1,102	1,054	661	1,192	1,368	922	2,160	2,946	2,331	2,698	2,707	2,755	2,840	2,609	2,609	2,609	2,238
事業用発電	294,020	323,351	317,895	344,393	361,666	356,651	372,494	363,915	415,401	387,257	349,777	371,926	423,235	475,143	453,720	457,589	462,589	467,000	453,662
地域熱供給	577	936	890	939	890	961	1,064	987	1,019	930	859	931	863	836	846	777	741	786	790
電気熱配分調整																			
産業	379,433	377,821	371,706	376,981	376,617	377,966	366,554	363,026	359,357	328,606	314,783	329,174	326,755	324,832	332,136	322,815	314,295	299,696	295,919
農林水産製造業	31,552	27,211	27,765	26,575	26,151	26,353	25,389	24,127	23,709	19,997	23,412	22,342	22,562	22,327	20,006	19,670	21,506	22,578	22,337
農林水産業	22,270	20,326	21,087	20,295	20,251	20,546	19,939	18,804	18,847	16,102	19,217	17,826	16,505	16,264	14,861	14,622	16,172	17,135	16,749
製造業	3,618	2,126	1,895	2,038	1,772	1,772	1,648	1,477	1,225	1,071	1,122	1,122	1,272	1,255	1,060	1,042	964	890	854
建設業	5,664	4,758	4,650	4,385	4,129	4,045	3,802	3,847	3,637	2,825	3,073	3,399	4,785	4,807	4,035	4,006	4,370	4,553	4,735
製造業	347,881	350,610	343,941	350,405	350,466	351,013	341,165	338,899	335,648	308,609	291,371	306,832	304,173	302,505	312,130	303,145	292,769	277,118	273,582
食品飲料	7,649	11,511	11,960	12,387	12,056	12,464	12,217	11,931	10,904	10,096	9,906	9,925	10,900	10,653	10,280	10,046	9,044	8,982	8,544
繊維	15,932	12,960	12,687	12,601	12,343	11,638	9,672	8,866	7,932	6,796	6,444	7,013	6,400	5,864	6,809	6,397	5,758	6,051	5,960
パルプ・紙・複合品	26,494	30,764	30,227	29,832	29,428	29,428	29,409	27,933	26,981	24,622	22,744	21,196	20,284	21,308	21,316	20,295	20,775	18,299	18,096
化学工業(石油・石炭製品)	69,654	75,661	73,271	73,875	74,369	76,673	75,422	74,713	73,945	70,253	69,430	69,287	68,340	64,961	68,622	65,462	63,856	58,918	59,768
化学工業(石油・石炭製品)	69,654	75,661	73,271	73,875	74,369	76,673	75,422	74,713	73,945	70,253	69,430	69,287	68,340	64,961	68,622	65,462	63,856	58,918	59,768
鉄鋼	43,423	39,270	38,018	37,538	37,436	34,353	34,410	33,451	32,471	31,481	27,890	27,451	27,325	27,903	28,482	27,498	26,621	25,545	25,290
鉄鋼	43,423	39,270	38,018	37,538	37,436	34,353	34,410	33,451	32,471	31,481	27,890	27,451	27,325	27,903	28,482	27,498	26,621	25,545	25,290
金属製品	150,689	151,803	149,057	154,908	156,242	156,934	153,538	155,635	159,837	144,990	135,198	152,625	148,409	150,772	157,157	154,588	148,375	142,094	139,161
金属製品	150,689	151,803	149,057	154,908	156,242	156,934	153,538	155,635	159,837	144,990	135,198	152,625	148,409	150,772	157,157	154,588	148,375	142,094	139,161
機械(金属製品)	8,309	6,281	6,315	6,241	6,266	6,162	5,688	5,642	5,041	4,800	4,065	3,997	3,870	3,740	3,849	3,740	3,346	3,617	3,260
機械(金属製品)	8,309	6,281	6,315	6,241	6,266	6,162	5,688	5,642	5,041	4,800	4,065	3,997	3,870	3,740	3,849	3,740	3,346	3,617	3,260
製造業(上記を除く)	4,777	5,682	5,863	6,065	5,938	6,040	5,819	5,202	4,445	4,445	4,147	3,827	4,291	3,998	3,948	4,014	3,796	3,588	3,341
業務(三次産業)	80,964	93,194	94,937	96,542	96,310	101,492	102,322	100,006	90,573	95,763	92,191	99,962	102,505	97,213	102,929	97,367	95,696	61,929	59,669
情報通信・運輸郵便・電気ガス水道業	11,796	6,975	7,486	8,050	8,344	8,460	7,766	7,414	6,255	18,486	27,245	35,080	40,207	42,247	41,921	40,276	40,828	9,496	7,891
卸小売・金融保険・不動産業	5,499	6,075	6,405	6,722	6,641	6,764	6,735	7,068	6,728	5,757	5,898	6,669	6,660	6,087	5,971	6,291	5,344	5,682	5,295
宿泊飲食・専門技術・生活関連サービス業	13,661	22,690	23,614	24,373	23,411	23,710	23,181	23,493	21,160	21,191	18,493	18,002	19,360	18,968	18,072	17,658	17,643	15,501	15,558
教育・学習支援業・医療・保健衛生・社会福祉	12,698	21,425	21,746	22,077	21,256	21,148	20,414	19,319	17,843	15,812	15,358	15,629	17,008	16,141	18,566	18,029	19,104	19,490	17,411
公務・分類不能	37,310	36,030	35,685	35,322	36,657	41,410	44,225	42,713	38,588	34,517	25,197	23,982	19,270	13,771	18,400	15,113	12,779	11,161	13,654
旅客	200,596	252,138	266,323	252,710	248,710	242,798	237,323	234,692	231,966	224,391	221,125	221,630	216,843	217,737	214,848	209,878	208,615	208,738	205,014
自動車(旅客)	99,443	145,385	149,903	149,899	147,740	142,430	137,820	134,544	133,540	128,937	130,256	129,515	127,971	128,931	125,810	120,879	120,257	119,744	118,913
鉄道・船舶・航空(旅客)	88,137	130,335	135,295	134,531	132,341	127,966	123,237	119,997	119,594	115,657	117,849	117,799	116,462	116,788	113,146	108,255	107,817	107,246	106,153
貨物	11,306	15,050	14,607	15,368	15,359	14,464	14,563	14,548	13,945	13,080	12,406	11,717	11,509	12,143	12,664	12,624	12,441	12,498	12,761
自動車(貨物)	101,153	106,753	106,420	102,810	100,969	100,369	99,503	100,148	98,427	95,454	90,869	92,114	88,872	88,803	89,038	88,999	88,357	86,994	86,101
鉄道・船舶・航空(貨物)	91,061	95,906	95,569	92,270	90,866	90,931	90,066	90,579	89,082	86,713	82,793	83,646	80,674	80,359	80,250	80,254	79,814	78,458	77,717
家庭	58,167	72,226	68,553	71,335	67,915	68,006	70,395	66,123	65,404	61,704	61,351	64,217	62,541	62,626	60,319	58,014	55,393	55,715	59,267
工業プロセス及び製品の使用	65,743	60,347	59,019	56,366	55,570	55,570	56,762	57,160	56,390	51,970	46,382	47,467	47,319	47,465	49,232	48,604	47,101	46,678	47,254
建築物	49,230	43,919	42,970	40,483	40,146	39,820	41,230	41,197	40,204	37,436	32,779	32,752	33,097	33,664	35,056	34,798	33,738	33,622	34,062
セメント製造	38,701	35,086	34,374	32,417	31,935	31,276	32,280	31,991	30,658	28,553	25,308	24,321	24,983	25,625	26,805	26,557	25,936	25,969	26,429
石灰製造	6,674	5,900	5,595	5,605	6,011	6,399	6,646	6,788	7,012	6,592	5,365	5,285	5,866	5,679	5,767	5,812	5,477	5,504	5,555
ガラス製造	313	233	223	211	223	262	222	237	213	173	140	164	168	179	193	194	188	188	194
その他プロセスにおける炭酸塩の使用	3,542	2,700	2,778	2,243	1,947	1,883	2,053	2,181	2,321	2,119	1,966	1,982	2,050	2,181	2,291	2,235	2,132	1,960	1,854
化学産業	7,041	6,810	6,347	6,250	6,052	6,135	5,795	5,875	5,966	5,107	4,872	5,427	5,103	4,652	4,788	4,685	4,591	4,300	4,485
アンモニウム製造	3,418	3,184	2,968	2,738	2,460	2,460	2,167	2,200	2,260	2,007	1,923	2,123	2,008	1,855	1,934	1,891	1,947	1,658	1,726
エチレン・カーバイド製造ほか	3,623	3,627	3,379	3,511	3,592	3,664	3,627	3,674	3,706	3,100	2,949	3,304	3,095	2,797	2,855	2,794	2,644	2,642	2,759
金属製造	7,244	6,740	6,763	6,601	6,366	6,483	6,497	6,568	6,695	6,237	5,468	6,101	5,965	6,061	6,181	6,107	5,916	5,801	5,723
燃料からの非エネルギー製品及び溶剤の使用	2,164	2,792	2,861	2,953	2,921	3,046	3,151	3,433	3,439	3,119	3,191	3,112	3,079	3,012	3,124	2,933	2,772	2,875	2,899

食品・飲料産業		64.3	86.5	78.2	79.9	85.3	86.3	90.1	87.5	86.2	71.5	71.3	75.9	75.8	76.4	82.3	80.4	83.0	79.4	85.1
廃棄物		24,010	32,858	32,523	32,768	33,516	32,704	31,854	29,907	30,482	31,853	28,194	28,710	28,026	29,827	29,365	28,502	28,975	29,129	28,829
廃棄物の焼却と野焼き（エネルギー利用を含む）		12,429	16,988	15,760	15,193	15,192	14,648	14,093	13,239	13,419	14,518	12,058	12,298	11,545	12,176	12,068	11,558	11,506	10,941	10,808
石油由来の界面活性剤の分解		703	656	631	577	517	507	507	522	561	530	514	527	524	528	605	617	625	619	636
廃棄物のエネルギー利用		10,878	15,214	16,133	16,998	17,808	17,549	17,054	16,145	16,502	16,805	15,622	15,885	15,957	17,123	16,692	16,327	16,844	17,569	17,385
その他（農業・間接CO ₂ 等）		6,664	5,693	5,218	4,955	4,775	4,618	4,560	4,495	4,506	4,079	3,727	3,622	3,503	3,515	3,523	3,419	3,366	3,299	3,247
農業		609	443	368	408	430	402	411	383	403	440	390	403	415	520	578	551	551	551	551
石炭施用		550	333	247	270	246	236	231	230	325	306	270	243	247	370	380	363	363	363	363
炭素施肥		59	110	120	138	184	166	179	153	175	134	120	160	168	150	189	189	189	189	189
燃料からの排出		581	1,030	1,074	1,022	967	925	962	990	1,033	948	864	814	773	758	705	701	663	645	577
間接CO ₂		5,474	4,220	3,776	3,524	3,378	3,290	3,188	3,121	2,974	2,691	2,472	2,406	2,316	2,238	2,241	2,166	2,151	2,103	2,118
合計		1,163,989	1,269,198	1,254,120	1,283,080	1,291,160	1,286,334	1,293,497	1,270,279	1,305,868	1,234,923	1,165,434	1,216,829	1,266,834	1,308,123	1,317,318	1,267,047	1,226,690	1,208,268	1,190,240

■ 排出量 [Mt CO₂]

排出源		1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
エネルギー転換部門		348	375	366	391	408	404	424	415	467	437	398	422	479	525	525	498	473	506	491
産業部門		379	378	372	377	377	377	367	363	359	329	315	329	327	327	325	323	314	300	296
運輸部門		201	252	256	256	249	243	237	235	242	242	221	235	217	218	215	210	209	207	205
業務その他部門		81.0	93.2	94.9	96.5	96.3	101	102	100	90.6	95.8	92.2	100	103	97.2	103	97.4	95.7	91.3	59.7
家庭部門		58.2	72.2	68.6	71.8	67.9	68.0	70.4	66.1	65.4	61.7	61.4	64.2	62.5	62.6	60.3	58.0	55.4	55.7	59.3
工業プロセス及び製品の使用		65.7	60.3	59.0	56.4	55.6	55.6	56.8	57.2	56.4	52.0	46.4	47.5	47.3	47.5	49.2	48.6	47.1	46.7	47.3
廃棄物		24.0	32.9	32.5	32.8	33.5	32.7	31.7	29.9	30.5	30.1	28.7	28.7	28.0	29.8	29.4	28.5	29.0	29.1	28.8
その他（農業・間接CO ₂ 等）		6.7	5.7	5.2	5.0	4.8	4.6	4.6	4.5	4.5	4.1	3.7	3.6	3.5	3.5	3.5	3.4	3.4	3.3	3.2
合計		1,164	1,269	1,254	1,283	1,291	1,286	1,293	1,270	1,306	1,235	1,165	1,217	1,267	1,308	1,317	1,267	1,227	1,208	1,190

■ 1990年度比

排出源		1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
エネルギー転換部門		0.0%	7.6%	5.0%	12.3%	17.0%	15.9%	21.7%	19.1%	34.1%	25.3%	14.1%	21.1%	37.6%	50.7%	50.7%	43.1%	35.8%	45.1%	40.9%
産業部門		0.0%	-0.42%	-2.0%	-0.65%	-0.74%	-0.54%	-3.4%	-4.3%	-5.3%	-13.4%	-17.0%	-13.2%	-13.9%	-14.4%	-12.5%	-14.9%	-17.2%	-21.0%	-22.0%
運輸部門		0.0%	25.7%	27.8%	26.0%	24.0%	21.0%	18.3%	17.0%	15.6%	11.9%	10.2%	10.5%	8.1%	8.5%	7.1%	4.6%	4.0%	3.1%	2.2%
業務その他部門		0.0%	15.1%	17.3%	19.2%	19.0%	25.4%	26.4%	23.5%	11.9%	18.3%	13.9%	23.5%	26.6%	20.1%	27.1%	20.3%	18.2%	-24.3%	-26.3%
家庭部門		0.0%	24.2%	17.9%	22.6%	16.8%	16.9%	21.0%	13.7%	12.4%	6.1%	5.5%	10.4%	7.5%	7.7%	3.7%	-0.26%	-4.8%	-4.2%	1.9%
工業プロセス及び製品の使用		0.0%	-8.2%	-10.2%	-14.3%	-15.5%	-15.5%	-13.7%	-13.1%	-14.2%	-21.0%	-29.5%	-27.8%	-28.0%	-27.8%	-25.1%	-26.1%	-28.4%	-29.0%	-28.1%
廃棄物		0.0%	36.9%	35.5%	36.5%	39.6%	36.2%	31.8%	24.6%	27.0%	32.7%	17.4%	19.6%	16.7%	24.2%	22.3%	18.7%	20.7%	21.3%	20.1%
その他（農業・間接CO ₂ 等）		0.0%	-14.6%	-21.7%	-25.6%	-28.3%	-30.7%	-31.6%	-32.5%	-32.4%	-38.8%	-44.1%	-45.6%	-47.4%	-47.2%	-47.1%	-48.7%	-49.5%	-50.5%	-51.3%
合計		0.0%	9.0%	7.7%	10.2%	10.9%	10.5%	11.1%	9.1%	12.2%	6.1%	0.12%	4.5%	8.8%	12.4%	13.2%	8.9%	5.4%	3.8%	2.3%

■ 2005年度比

排出源		1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
エネルギー転換部門									-2.1%	10.2%	3.0%	-6.2%	-0.44%	13.1%	23.8%	23.8%	17.6%	11.6%	19.3%	15.8%
産業部門								0.0%	-0.96%	-2.0%	-10.4%	-14.1%	-10.2%	-10.9%	-11.4%	-9.4%	-11.9%	-14.3%	-18.2%	-19.3%
運輸部門								0.0%	-1.1%	-2.3%	-5.4%	-6.8%	-6.6%	-8.6%	-8.3%	-9.5%	-11.6%	-12.1%	-12.9%	-13.6%
業務その他部門								0.0%	-2.3%	-11.5%	-6.4%	-9.9%	-2.3%	0.18%	-5.0%	0.59%	-4.8%	-6.5%	-40.1%	-41.7%
家庭部門								0.0%	-6.1%	-7.1%	-12.3%	-12.8%	-8.8%	-11.2%	-11.0%	-14.3%	-17.6%	-20.9%	-20.9%	-15.8%
工業プロセス及び製品の使用								0.0%	0.70%	-0.65%	-8.4%	-12.8%	-16.4%	-16.6%	-16.4%	-13.3%	-17.4%	-17.0%	-17.8%	-16.8%
廃棄物								0.0%	-5.5%	-3.7%	0.63%	-10.9%	-9.3%	-11.5%	-5.8%	-7.2%	-10.0%	-8.5%	-8.0%	-8.9%
その他（農業・間接CO ₂ 等）								0.0%	-1.4%	-1.2%	-10.5%	-18.3%	-20.6%	-23.2%	-22.9%	-22.7%	-25.0%	-26.2%	-27.7%	-28.8%
合計								0.0%	-1.8%	0.96%	-4.5%	-9.9%	-5.9%	-2.1%	1.1%	1.8%	-2.0%	-5.2%	-6.6%	-8.0%

■ 2013年度比

排出源		1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
エネルギー転換部門																0.0%	-5.1%	-9.9%	-3.7%	-6.5%
産業部門																0.0%	0.0%	-2.8%	-5.4%	-10.9%
運輸部門																0.0%	-2.3%	-2.9%	-3.8%	-4.6%
業務その他部門																0.0%	-5.4%	-7.0%	-40.4%	-42.0%
家庭部門																0.0%	-3.8%	-6.2%	-7.6%	-1.7%
工業プロセス及び製品の使用																0.0%	-1.3%	-4.3%	-5.2%	-4.0%
廃棄物																0.0%	-2.9%	-1.3%	-0.81%	-1.8%
その他（農業・間接CO ₂ 等）																0.0%	-3.0%	-4.5%	-6.4%	-7.9%

		■ 前年度比																			
		1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
排出源	エネルギー転換部門	2.4%	-2.4%	7.0%	4.2%	-0.97%	5.0%	-2.1%	12.6%	-6.8%	-8.9%	6.1%	13.6%	9.5%	0.01%	-5.1%	-5.1%	5.1%	6.9%	-2.9%	
	産業部門	2.7%	-1.6%	1.4%	-0.10%	0.20%	-2.9%	-0.98%	-1.0%	-8.6%	-4.2%	4.6%	-0.74%	-0.58%	-2.2%	2.2%	-2.8%	-2.6%	-4.6%	-1.3%	
	運輸部門	-0.13%	1.7%	-1.6%	-1.1%	-2.4%	-2.3%	-1.1%	-1.2%	-3.3%	-1.5%	0.23%	-2.2%	0.41%	0.1%	-1.3%	-2.3%	-0.60%	-0.90%	-0.83%	
	業務その他部門	-1.2%	1.9%	1.7%	-0.24%	1.7%	5.4%	0.82%	-2.3%	-9.4%	5.7%	8.4%	2.5%	-5.2%	-5.2%	5.9%	-5.4%	-1.7%	-35.9%	-2.7%	
	家庭部門	5.3%	0.13%	4.1%	-1.8%	0.13%	3.5%	-1.1%	-1.1%	-7.1%	-5.7%	4.1%	-0.61%	0.14%	0.31%	-3.7%	-3.8%	-4.5%	6.4%	6.4%	
	工業プロセス及び製品の使用	0.80%	-2.2%	-4.5%	-1.4%	-0.0005%	2.1%	0.70%	-1.3%	-1.3%	-7.8%	-10.8%	2.3%	-0.31%	0.1%	3.7%	-1.3%	-3.1%	-0.90%	1.3%	
	廃棄物	4.7%	-1.0%	0.75%	2.3%	-2.4%	-3.2%	-5.5%	1.9%	-1.3%	4.5%	1.8%	-2.4%	6.4%	6.4%	-1.5%	-2.9%	1.7%	0.53%	-1.0%	
	その他（農業・間接CO ₂ 等）	1.3%	-8.3%	-5.0%	-3.6%	-1.2%	-3.3%	-1.2%	-1.4%	0.26%	-9.5%	-8.6%	-2.5%	-3.3%	0.34%	0.23%	-3.0%	-1.6%	-2.0%	-1.5%	
	合計	1.8%	-1.2%	2.3%	0.63%	-0.37%	0.56%	-1.8%	2.8%	-5.4%	-5.6%	4.4%	4.1%	3.3%	0.70%	-3.8%	-3.2%	-1.5%	-1.5%	-9.6%	
	合計																0.0%	-3.8%	-6.9%	-8.3%	-9.6%