Contents	CO_2 emissions, 1960-recent
Metadata	Information about this file
TotalW	Total CO_2 emissions from fossil fuel consumption and cement production, worldwide, 1960-2018, (billions of tonnes)
GasW	CO_2 emissions from gas fuel consumption, worldwide, 1960-2017, (billions of tonnes)
LiquidW	CO_2 emissions from liquid fuel consumption, worldwide, 1960-2017, (billions of tonnes)
SolidW	CO_2 emissions from solid fuel consumption, worldwide, 1960-2017, (billions of tonnes)
TotalUK	Total CO_2 emissions from fossil fuel consumption and cement production, UK, 1960-2014, (billions of tonnes)
TotalUS	Total CO_2 emissions from fossil fuel consumption and cement production, US, 1960-2014, (billions of tonnes)
TotalFR	Total CO_2 emissions from fossil fuel consumption and cement production, France, 1960-2014, (billions of tonnes)
TotalJP	Total CO_2 emissions from fossil fuel consumption and cement production, Japan, 1960-2014, (billions of tonnes)
TotalCN	Total CO_2 emissions from fossil fuel consumption and cement production, China, 1960-2014, (billions of tonnes)

http://www.dannydorling.org/

Metadata

These reference tables contain statistics of the carbon dioxide emissions from the fuel and industries since 1960, and all the tables here correspond to those in Fig15. The difference between this one and Fig15 is the way in which we present the data. Whereas the Fig15 uses the conventional way by putting the time as the x-axis, here we replace the time with the absolute change in that year. Each circle represents a certain year.

UK and France have seen a continuing decrease in emissions since the industrialization in the 1970s. Japan and US are very similar, both decreased their emissions during the 1970s and 1980s and then resumed growth afterwards. China saw a dramatic increase in emissions in the 20th century.

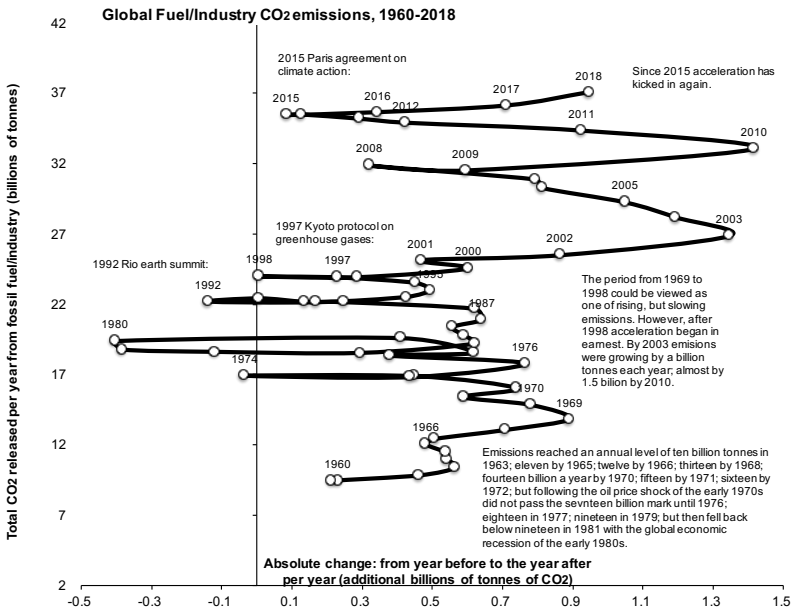
Contents

Total CO_2 emissions from fossil fuel consumption and cement production, worldwide, 1960-2018, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html; 2015-2017 estimates are preliminary and are based on energy statistics published by BP (data in red in Column B). https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-15stats-review-2018-full-report.pdf; 2018 estimate is preliminary and is derived from https://www.icos-cp.eu/sites/default/files/inline-images/s09_FossilFuel_and_Cement_emissions_1959.png.

Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.4214	8.989	
1960	0.2315	9.411	1960
1961	0.2138	9.452	
1962	0.4635	9.838	
1963	0.5656	10.379	
1964	0.5435	10.969	
1965	0.5381	11.466	
1966	0.4824	12.046	1966
1967	0.5089	12.431	
1968	0.7077	13.063	
1969	0.8912	13.846	1969
1970	0.7816	14.846	1970
1971	0.5891	15.410	
1972	0.7418	16.024	
1973	0.4498	16.893	
1974	-0.0339	16.924	1974
1975	0.4387	16.826	
1976	0.7649	17.801	1976
1977	0.3804	18.355	
1978	0.6194	18.562	
1979	0.4132	19.594	
1980	-0.4036	19.388	1980
1981	-0.3820	18.787	
1982	-0.1188	18.624	
1983	0.2964	18.549	
1984	0.6216	19.217	
1985	0.5895	19.793	
1986	0.5599	20.396	
1987	0.6426	20.912	1987
1988	0.6210	21.681	
1989	0.2503	22.154	
1990	0.1375	22.182	
1991	0.0066	22.429	
1992	-0.1381	22.195	1992
1993	0.1694	22.153	
1994	0.4271	22.534	
1995	0.4946	23.007	1995
1996	0.4540	23.523	
1997	0.2310	23.915	1997
1998	0.0076	23.985	1998
1999	0.2869	23.931	
2000	0.6037	24.559	2000
2001	0.4677	25.138	2001
2002	0.8644	25.494	2002
2003	1.3467	26.867	2003
2004	1.1941	28.188	
2005	1.0496	29.255	2005
2006	0.8126	30.287	
2007	0.7945	30.880	
2008	0.3215	31.876	2008
2009	0.5954	31.523	2009
2010	1.4171	33.067	2010
2011	0.9263	34.357	2011
2012	0.4253	34.919	2012
2013	0.2933	35.208	
2014	0.1274	35.506	
2015	0.0846	35.463	2015
2016	0.3453	35.675	2016
2017	0.7125	36.153	2017
2018	0.9467	37.100	2018



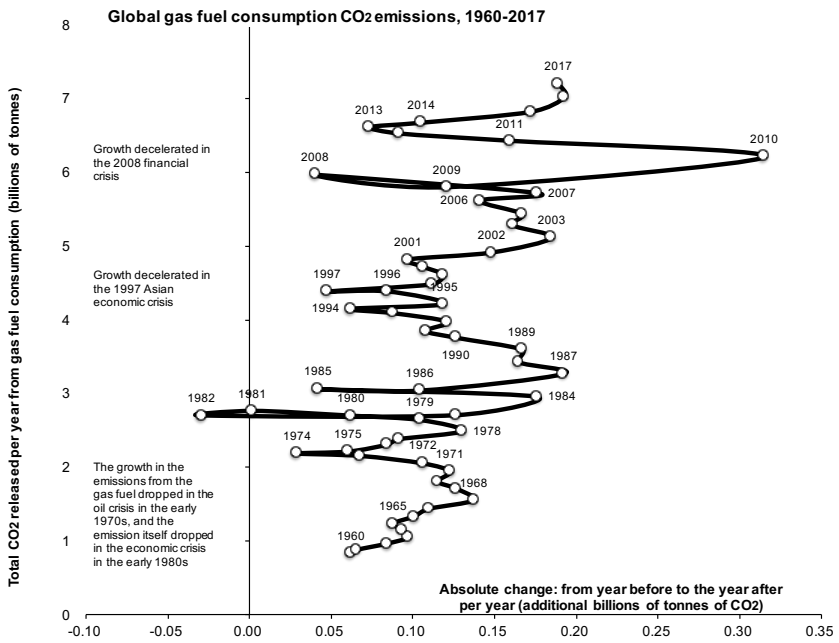
Contents

Total CO_2 emissions from gas fuel consumption, worldwide, 1960-2017, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html; 2015-2017 estimates are preliminary and are based on energy statistics published by BP (data in red in Column B). https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-15stats-review-2018-full-report.pdf

Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0769	0.755	
1960	0.0623	0.832	1960
1961	0.0660	0.879	
1962	0.0843	0.964	
1963	0.0971	1.048	
1964	0.0934	1.158	
1965	0.0879	1.235	1965
1966	0.1008	1.334	
1967	0.1099	1.436	
1968	0.1374	1.554	1968
1969	0.1264	1.711	
1970	0.1154	1.806	
1971	0.1227	1.942	1971
1972	0.1063	2.052	1972
1973	0.0678	2.154	
1974	0.0293	2.187	1974
1975	0.0605	2.213	1975
1976	0.0843	2.308	
1977	0.0916	2.382	
1978	0.1301	2.492	1978
1979	0.1044	2.642	1979
1980	0.0623	2.700	1980
1981	0.0018	2.766	1981
1982	-0.0293	2.704	1982
1983	0.1264	2.708	
1984	0.1759	2.957	1984
1985	0.0421	3.059	1985
1986	0.1044	3.041	1986
1987	0.1924	3.268	1987
1988	0.1649	3.426	
1989	0.1667	3.598	1989
1990	0.1264	3.759	1990
1991	0.1081	3.851	
1992	0.1209	3.975	
1993	0.0879	4.093	
1994	0.0623	4.151	1994
1995	0.1191	4.217	1995
1996	0.0843	4.389	1996
1997	0.0476	4.386	1997
1998	0.1118	4.485	
1999	0.1191	4.609	
2000	0.1063	4.723	
2001	0.0971	4.822	2001
2002	0.1484	4.917	2002
2003	0.1850	5.119	2003
2004	0.1612	5.287	
2005	0.1667	5.441	
2006	0.1411	5.621	2006
2007	0.1759	5.723	2007
2008	0.0403	5.972	2008
2009	0.1209	5.804	2009
2010	0.3151	6.214	2010
2011	0.1594	6.434	2011
2012	0.0916	6.533	
2013	0.0733	6.617	2013
2014	0.1053	6.679	2014
2015	0.1725	6.828	
2016	0.1928	7.024	
2017	0.1891	7.213	2017



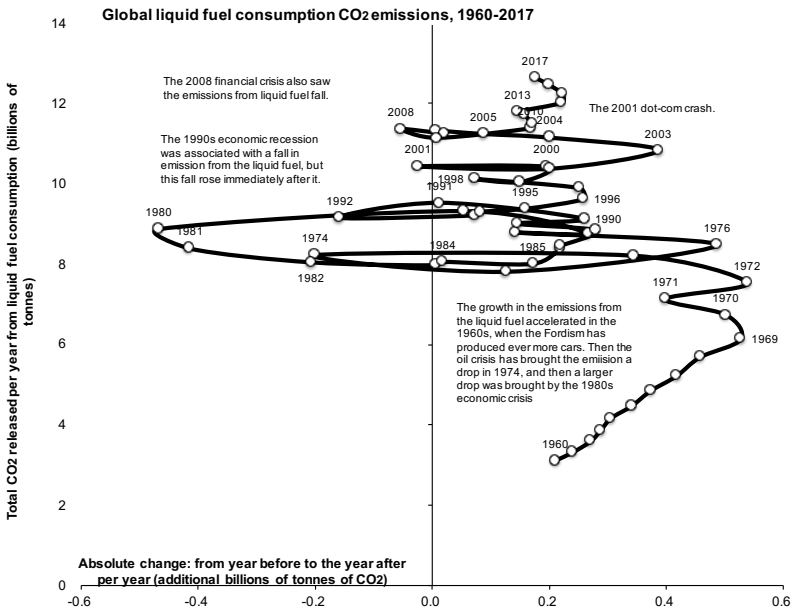
Contents

Total CO_2 emissions from liquid fuel consumption, worldwide, 1960-2017, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html; 2015-2017 estimates are preliminary and are based on energy statistics published by BP (data in red in Column B). https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-15stats-review-2018-full-report.pdf

Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.2198	2.891	
1960	0.2107	3.111	1960
1961	0.2400	3.312	
1962	0.2711	3.591	
1963	0.2876	3.855	
1964	0.3059	4.166	
1965	0.3408	4.466	
1966	0.3737	4.847	
1967	0.4177	5.214	
1968	0.4580	5.683	
1969	0.5276	6.130	1969
1970	0.5020	6.738	1970
1971	0.3994	7.134	1971
1972	0.5386	7.537	1972
1973	0.3444	8.211	
1974	-0.1997	8.226	1974
1975	0.1264	7.812	
1976	0.4873	8.478	1976
1977	0.1429	8.786	
1978	0.2675	8.764	
1979	0.0550	9.321	
1980	-0.4672	8.874	1980
1981	-0.4140	8.387	1981
1982	-0.2070	8.046	1982
1983	0.0055	7.973	
1984	0.0183	8.057	1984
1985	0.1722	8.010	1985
1986	0.2198	8.402	
1987	0.2180	8.449	
1988	0.2803	8.838	
1989	0.1466	9.010	
1990	0.2601	9.131	1990
1991	0.0128	9.530	1991
1992	-0.1576	9.156	1992
1993	0.0733	9.215	
1994	0.0824	9.303	
1995	0.1594	9.380	1995
1996	0.2583	9.622	1996
1997	0.2510	9.896	
1998	0.0733	10.124	1998
1999	0.1502	10.043	
2000	0.1960	10.424	2000
2001	-0.0238	10.435	2001
2002	0.2015	10.376	
2003	0.3866	10.838	2003
2004	0.2015	11.150	2004
2005	0.0879	11.241	2005
2006	0.0055	11.325	
2007	0.0220	11.252	
2008	-0.0531	11.369	2008
2009	0.0073	11.146	
2010	0.1685	11.384	2010
2011	0.1704	11.483	
2012	0.1576	11.725	
2013	0.1466	11.798	2013
2014	0.2208	12.018	
2015	0.2224	12.240	
2016	0.1998	12.463	
2017	0.1765	12.639	2017

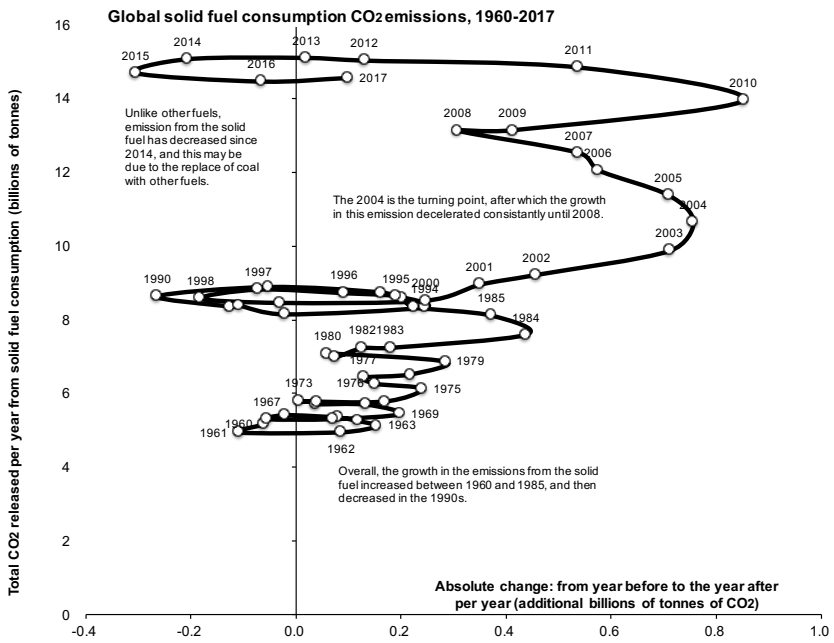


Contents

Total CO_2 emissions from solid fuel consumption, worldwide, 1960-2017, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html; 2015-2017 estimates are preliminary and are based on energy statistics published by BP (data in red in Column B). https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-15stats-review-2018-full-report.pdf

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.1026	5.064	1959
1960	-0.0605	5.166	1960
1961	-0.1081	4.943	1961
1962	0.0861	4.950	1962
1963	0.1539	5.115	1963
1964	0.1172	5.258	
1965	0.0788	5.349	
1966	-0.0220	5.415	
1967	-0.0550	5.305	1967
1968	0.0696	5.305	
1969	0.1979	5.445	1969
1970	0.1337	5.701	
1971	0.0366	5.712	
1972	0.0403	5.774	
1973	0.0055	5.793	1973
1974	0.1685	5.785	
1975	0.2400	6.130	1975
1976	0.1521	6.265	1976
1977	0.1282	6.434	1977
1978	0.2180	6.522	
1979	0.2840	6.870	1979
1980	0.0605	7.090	1980
1981	0.0751	6.991	
1982	0.1264	7.240	1982
1983	0.1795	7.244	1983
1984	0.4378	7.599	1984
1985	0.3719	8.119	1985
1986	0.2253	8.343	
1987	0.2015	8.570	
1988	0.1630	8.746	
1989	-0.0513	8.896	
1990	-0.2638	8.643	1990
1991	-0.1264	8.369	
1992	-0.1081	8.391	
1993	-0.0220	8.152	
1994	0.2455	8.347	1994
1995	0.1905	8.643	1995
1996	0.0916	8.728	1996
1997	-0.0714	8.827	1997
1998	-0.1814	8.585	1998
1999	-0.0293	8.464	
2000	0.2473	8.526	2000
2001	0.3499	8.958	2001
2002	0.4580	9.226	2002
2003	0.7108	9.874	2003
2004	0.7566	10.648	2004
2005	0.7090	11.388	2005
2006	0.5752	12.066	2006
2007	0.5386	12.538	2007
2008	0.3078	13.143	2008
2009	0.4122	13.154	2009
2010	0.8519	13.967	2010
2011	0.5386	14.858	2011
2012	0.1301	15.044	2012
2013	0.0202	15.118	2013
2014	-0.2062	15.085	2014
2015	-0.3049	14.705	2015
2016	-0.0654	14.475	2016
2017	0.0994	14.574	2017

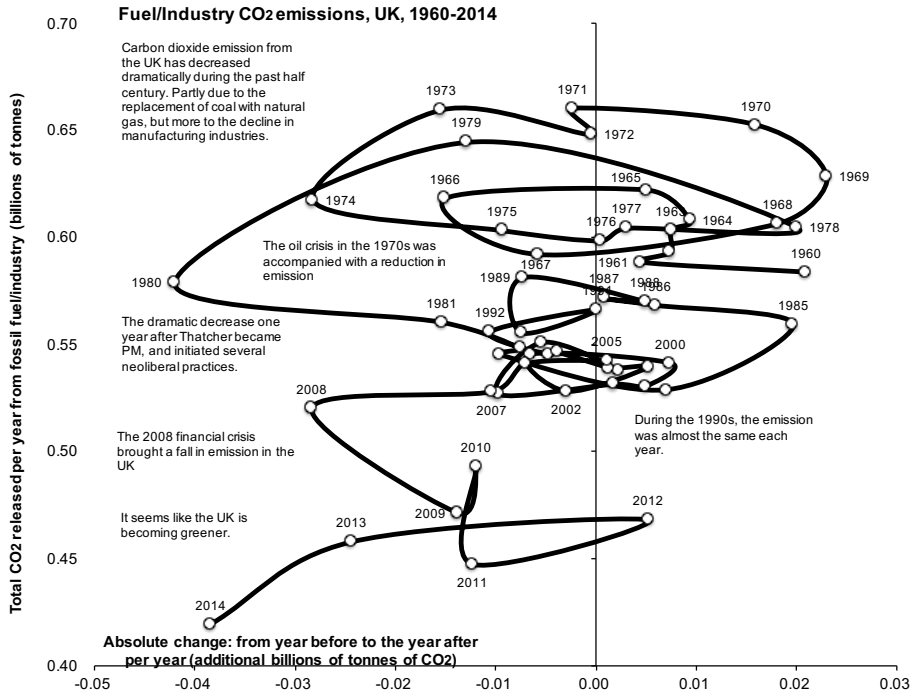


Contents

Total CO_2 emissions from fossil fuel consumption and cement production, UK, 1960-2014, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0373	0.547	1959
1960	0.0210	0.584	1960
1961	0.0045	0.588	1961
1962	0.0074	0.593	
1963	0.0075	0.603	1963
1964	0.0094	0.608	1964
1965	0.0051	0.622	1965
1966	-0.0150	0.618	1966
1967	-0.0058	0.592	1967
1968	0.0182	0.606	1968
1969	0.0230	0.628	1969
1970	0.0160	0.653	1970
1971	-0.0023	0.660	1971
1972	-0.0004	0.648	1972
1973	-0.0154	0.659	1973
1974	-0.0282	0.617	1974
1975	-0.0093	0.603	1975
1976	0.0006	0.598	1976
1977	0.0031	0.604	1977
1978	0.0201	0.605	1978
1979	-0.0129	0.644	1979
1980	-0.0420	0.579	1980
1981	-0.0154	0.560	1981
1982	-0.0075	0.548	
1983	-0.0096	0.545	
1984	0.0071	0.529	
1985	0.0197	0.559	1985
1986	0.0060	0.568	1986
1987	0.0008	0.571	1987
1988	0.0049	0.570	1988
1989	-0.0073	0.581	1989
1990	-0.0074	0.555	
1991	0.0002	0.566	1991
1992	-0.0106	0.556	1992
1993	-0.0048	0.545	
1994	-0.0038	0.546	
1995	0.0023	0.538	
1996	-0.0054	0.551	
1997	-0.0098	0.527	
1998	0.0018	0.531	
1999	0.0049	0.531	
2000	0.0075	0.541	2000
2001	-0.0066	0.545	
2002	-0.0029	0.528	2002
2003	0.0053	0.540	
2004	0.0013	0.539	
2005	0.0011	0.542	2005
2006	-0.0071	0.541	
2007	-0.0104	0.528	2007
2008	-0.0283	0.520	2008
2009	-0.0137	0.471	2009
2010	-0.0119	0.493	2010
2011	-0.0123	0.447	2011
2012	0.0052	0.468	2012
2013	-0.0244	0.458	2013
2014	-0.0384	0.419	2014

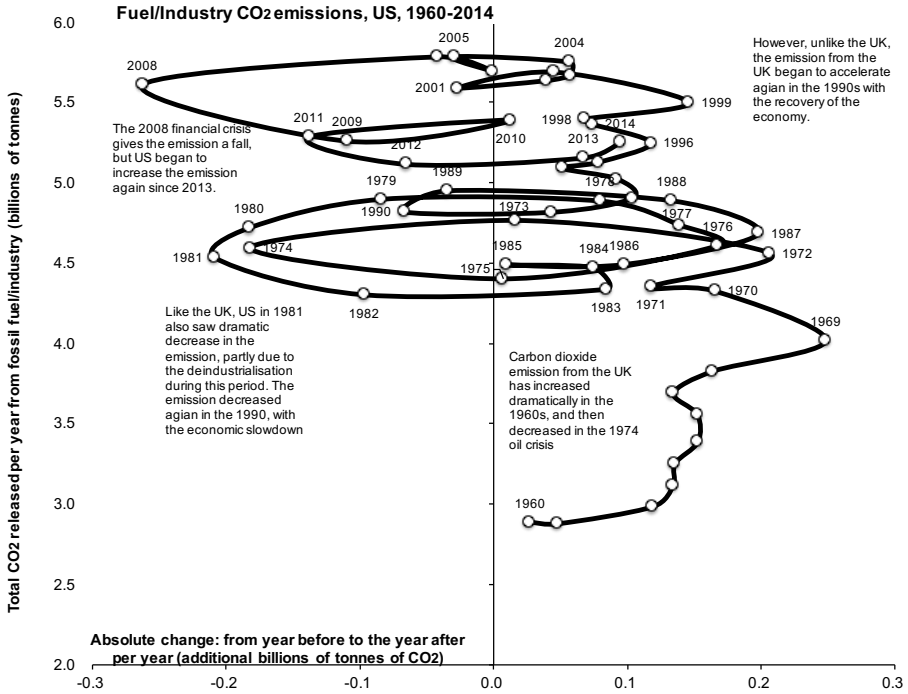


Contents

Total CO_2 emissions from fossil fuel consumption and cement production, US, 1960-2014, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0647	2.824	
1960	0.0273	2.888	1960
1961	0.0482	2.878	
1962	0.1193	2.985	
1963	0.1343	3.117	
1964	0.1357	3.253	
1965	0.1528	3.388	
1966	0.1523	3.559	
1967	0.1346	3.693	
1968	0.1644	3.828	
1969	0.2486	4.021	1969
1970	0.1659	4.325	1970
1971	0.1179	4.353	1971
1972	0.2065	4.561	1972
1973	0.0168	4.766	1973
1974	-0.1818	4.595	1974
1975	0.0073	4.403	1975
1976	0.1678	4.609	1976
1977	0.1388	4.738	1977
1978	0.0797	4.887	1978
1979	-0.0838	4.898	1979
1980	-0.1828	4.719	1980
1981	-0.2081	4.532	1981
1982	-0.0969	4.303	1982
1983	0.0842	4.338	1983
1984	0.0753	4.472	1984
1985	0.0101	4.489	1985
1986	0.0978	4.492	1986
1987	0.1984	4.685	1987
1988	0.1332	4.889	1988
1989	-0.0345	4.951	1989
1990	-0.0671	4.819	1990
1991	0.0430	4.817	
1992	0.1038	4.906	
1993	0.0923	5.025	
1994	0.0521	5.090	
1995	0.0788	5.129	
1996	0.1178	5.248	1996
1997	0.0744	5.364	
1998	0.0679	5.397	1998
1999	0.1462	5.500	1999
2000	0.0455	5.689	
2001	-0.0262	5.591	2001
2002	0.0399	5.637	
2003	0.0573	5.671	
2004	0.0570	5.751	2004
2005	-0.0294	5.785	2005
2006	-0.0003	5.693	
2007	-0.0416	5.784	
2008	-0.2625	5.610	2008
2009	-0.1092	5.259	2009
2010	0.0131	5.391	2010
2011	-0.1379	5.285	2011
2012	-0.0652	5.115	2012
2013	0.0674	5.155	2013
2014	0.0950	5.250	2014

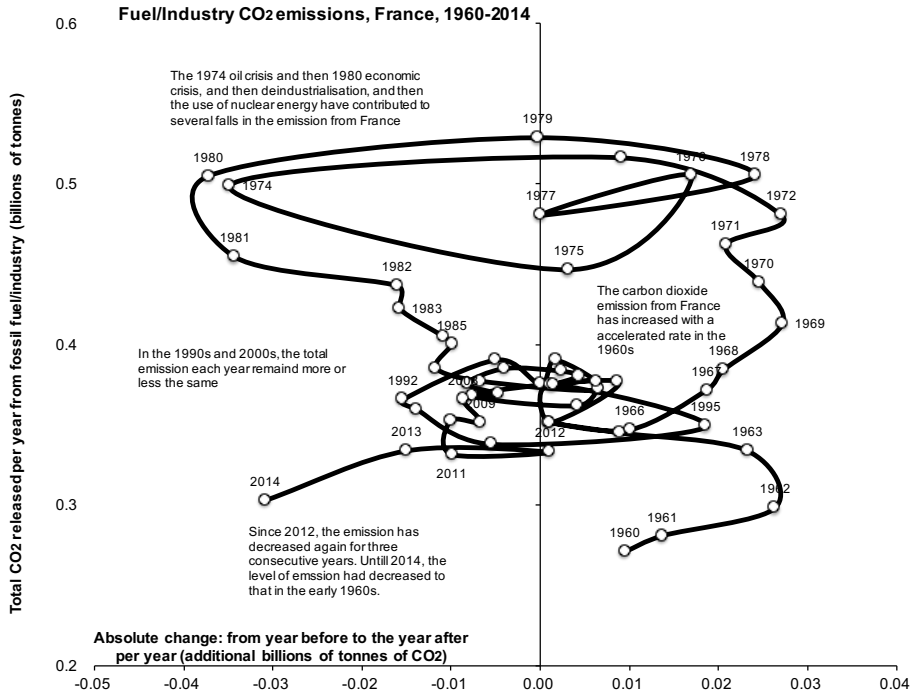


Contents

Total CO_2 emissions from fossil fuel consumption and cement production, France, 1960-2014, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0091	0.262	
1960	0.0095	0.271	1960
1961	0.0137	0.281	1961
1962	0.0264	0.298	1962
1963	0.0233	0.334	1963
1964	0.0089	0.345	
1965	0.0010	0.352	
1966	0.0101	0.347	1966
1967	0.0187	0.372	1967
1968	0.0206	0.384	1968
1969	0.0272	0.413	1969
1970	0.0246	0.439	1970
1971	0.0208	0.462	1971
1972	0.0271	0.480	1972
1973	0.0092	0.516	
1974	-0.0348	0.499	1974
1975	0.0033	0.447	1975
1976	0.0170	0.505	1976
1977	0.0001	0.480	1977
1978	0.0241	0.505	1978
1979	-0.0002	0.529	1979
1980	-0.0372	0.505	1980
1981	-0.0342	0.454	1981
1982	-0.0160	0.437	1982
1983	-0.0158	0.422	1983
1984	-0.0109	0.405	
1985	-0.0099	0.401	1985
1986	-0.0117	0.385	
1987	-0.0067	0.377	
1988	0.0066	0.372	
1989	0.0017	0.390	
1990	0.0000	0.375	
1991	-0.0049	0.390	
1992	-0.0154	0.366	1992
1993	-0.0139	0.360	
1994	-0.0054	0.338	
1995	0.0186	0.349	1995
1996	0.0012	0.375	
1997	0.0011	0.351	
1998	0.0087	0.377	
1999	-0.0076	0.369	
2000	0.0043	0.362	
2001	0.0064	0.377	
2002	0.0016	0.375	
2003	0.0043	0.380	
2004	0.0023	0.383	
2005	-0.0040	0.385	
2006	-0.0081	0.375	
2007	-0.0047	0.369	
2008	-0.0086	0.366	2008
2009	-0.0066	0.352	2009
2010	-0.0100	0.353	
2011	-0.0099	0.332	2011
2012	0.0011	0.333	2012
2013	-0.0150	0.334	2013
2014	-0.0308	0.303	2014

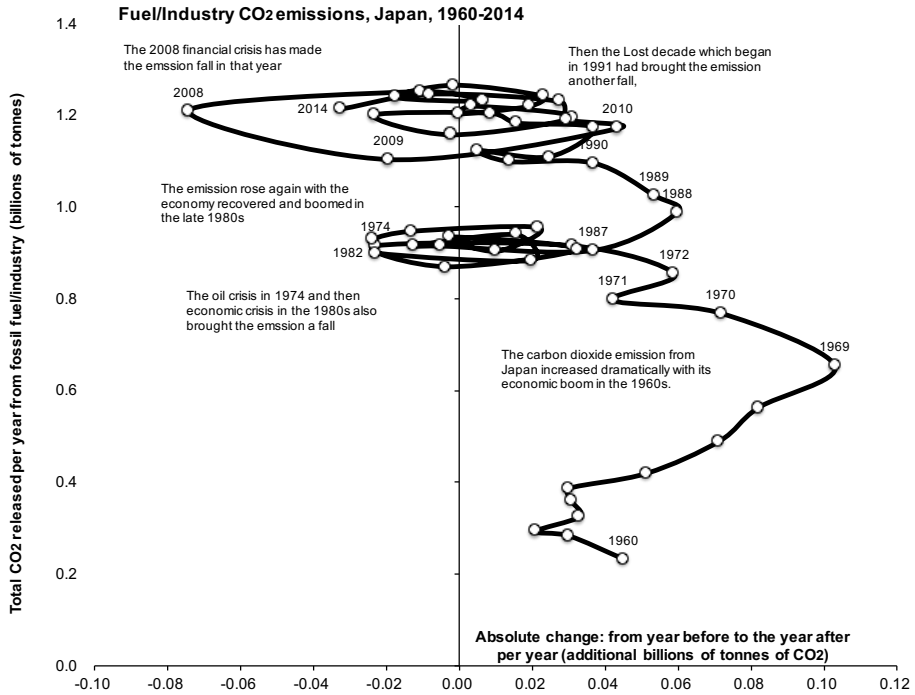


Contents

Total CO_2 emissions from fossil fuel consumption and cement production, Japan, 1960-2014, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0399	0.193	1959
1960	0.0451	0.233	1960
1961	0.0302	0.283	
1962	0.0210	0.293	
1963	0.0330	0.325	
1964	0.0308	0.359	
1965	0.0302	0.387	
1966	0.0514	0.419	
1967	0.0714	0.489	
1968	0.0820	0.562	
1969	0.1030	0.653	1969
1970	0.0717	0.768	1970
1971	0.0422	0.797	1971
1972	0.0591	0.853	1972
1973	0.0312	0.915	
1974	-0.0228	0.915	1974
1975	-0.0035	0.869	
1976	0.0325	0.908	
1977	-0.0025	0.934	
1978	0.0102	0.903	
1979	0.0218	0.955	
1980	-0.0130	0.947	
1981	-0.0237	0.929	
1982	-0.0229	0.899	1982
1983	0.0199	0.883	
1984	0.0158	0.939	
1985	-0.0124	0.915	
1986	-0.0048	0.915	
1987	0.0368	0.905	1987
1988	0.0599	0.988	1988
1989	0.0535	1.025	1989
1990	0.0369	1.095	1990
1991	0.0138	1.098	
1992	0.0052	1.123	
1993	0.0247	1.109	
1994	0.0367	1.172	
1995	0.0157	1.182	
1996	0.0087	1.204	
1997	-0.0234	1.200	
1998	-0.0021	1.157	
1999	0.0313	1.196	
2000	0.0034	1.220	
2001	-0.0002	1.202	
2002	0.0193	1.219	
2003	0.0230	1.241	
2004	-0.0014	1.265	
2005	-0.0172	1.238	
2006	0.0065	1.230	
2007	-0.0107	1.251	
2008	-0.0741	1.209	2008
2009	-0.0192	1.103	2009
2010	0.0436	1.171	2010
2011	0.0292	1.190	
2012	0.0277	1.229	
2013	-0.0081	1.245	
2014	-0.0324	1.213	2014



Contents

Total CO_2 emissions from fossil fuel consumption and cement production, China, 1960-2014, (billions of tonnes)

Source: Boden, T. A., Marland, G., and Andres, R. J.: Global, Regional, and National Fossil-Fuel CO2 Emissions, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A., doi 10.3334/CDIAC/00001_V2017, 2017; available at: http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
Frequency: Yearly, End of period

Observation date	Absolute change (billions of tonnes)	Emission (billions of tonnes)	Label
1959	0.0589	0.721	1959
1960	-0.0848	0.780	1960
1961	-0.1700	0.552	
1962	-0.0576	0.440	
1963	-0.0017	0.436	
1964	0.0196	0.437	
1965	0.0429	0.476	
1966	-0.0214	0.522	
1967	-0.0269	0.433	
1968	0.0719	0.469	
1969	0.1512	0.577	1969
1970	0.1496	0.771	
1971	0.0799	0.876	
1972	0.0459	0.931	
1973	0.0282	0.968	1973
1974	0.0885	0.987	
1975	0.1040	1.145	
1976	0.0823	1.195	
1977	0.1329	1.309	1977
1978	0.0922	1.461	
1979	0.0025	1.494	
1980	-0.0217	1.466	1980
1981	0.0565	1.450	
1982	0.1077	1.579	
1983	0.1172	1.666	
1984	0.1496	1.813	
1985	0.1269	1.965	
1986	0.1215	2.067	
1987	0.1501	2.208	1987
1988	0.0993	2.368	
1989	0.0364	2.407	1989
1990	0.0785	2.440	
1991	0.1239	2.563	
1992	0.1564	2.688	
1993	0.1837	2.876	
1994	0.2206	3.056	1994
1995	0.2023	3.318	
1996	0.0746	3.460	
1997	-0.0693	3.467	1997
1998	-0.0757	3.322	
1999	0.0404	3.315	
2000	0.0847	3.402	2000
2001	0.2224	3.485	2001
2002	0.5260	3.847	2002
2003	0.6911	4.537	2003
2004	0.6777	5.229	2004
2005	0.6473	5.892	2005
2006	0.5665	6.524	2006
2007	0.5115	7.025	2007
2008	0.4847	7.547	2008
2009	0.6110	7.994	2009
2010	0.8656	8.769	2010
2011	0.6258	9.726	2011
2012	0.2620	10.020	2012
2013	0.1316	10.250	2013
2014	0.0339	10.284	2014