

Table 11.5 Nitrous Oxide Emissions, 1980-2009

(Thousand Metric Tons of Nitrous Oxide)

Year	Energy Sources			Waste Management			Agricultural Sources				Industrial Processes ³	Total
	Mobile Combustion ¹	Stationary Combustion ²	Total	Waste Combustion	Human Sewage in Wastewater	Total	Nitrogen Fertilization of Soils	Crop Residue Burning	Solid Waste of Domesticated Animals	Total		
1980	60	44	104	1	R10	R11	R364	1	R75	R440	88	R642
1981	63	44	106	1	R10	R11	R364	2	R74	R440	R84	R641
1982	67	42	108	1	R10	R11	R339	2	R74	R414	R80	R614
1983	71	43	114	1	R11	R11	R337	1	R75	R413	R79	R617
1984	86	45	132	1	R11	R11	R355	R2	R74	R431	R87	R661
1985	98	46	143	1	R11	R12	R344	2	R73	R419	R88	R662
1986	107	45	152	1	R11	R12	R329	R2	R71	R402	R86	R652
1987	120	46	166	1	R12	R13	R328	1	R71	R400	R90	R669
1988	138	48	185	1	R12	R13	R329	1	R71	R401	R95	R694
1989	146	49	R195	1	R12	R13	R336	1	R70	R407	R98	R713
1990	R88	47	R135	1	R12	R13	R432	1	R66	R499	96	R743
1991	R93	46	R139	1	R13	R14	R429	1	R66	R497	R98	R748
1992	R96	47	R143	1	R13	R14	R445	2	R66	R512	95	R764
1993	R100	48	R148	1	R13	R14	R439	1	R68	R508	100	R770
1994	R104	48	R152	1	R13	R15	R462	2	R68	R532	110	R808
1995	R125	49	R174	1	R13	R15	R423	1	R69	R494	R110	R793
1996	R129	51	R180	1	R14	R15	R418	2	R68	R487	R115	R797
1997	R126	51	R178	1	R14	R15	R417	2	R69	R487	R72	R752
1998	R128	51	R179	1	R14	R15	R422	2	R69	R493	R57	R744
1999	R124	51	R175	1	R15	R16	R421	2	R69	R492	R56	R738
2000	R122	53	R175	1	R15	R16	R412	2	R70	R484	56	R731
2001	R117	51	R168	1	R15	R16	R405	2	R71	R477	R46	R708
2002	R115	51	R166	1	R15	R16	R403	2	R70	R474	R50	R706
2003	R114	51	R165	1	R15	R16	R414	2	R69	R485	R45	R711
2004	R114	52	R167	1	R15	R17	R446	2	R69	R517	R45	R745
2005	R109	53	R162	1	R16	R17	R455	2	R70	R526	R45	R750
2006	R107	52	R159	1	R16	R17	R457	2	R71	R530	R46	R751
2007	R106	52	R159	1	R16	R17	R471	2	R71	R544	R47	R767
2008	R101	51	R151	1	R16	R17	R468	2	R71	R541	R41	R750
2009	97	46	143	1	16	18	468	2	70	540	36	737

¹ Emissions from passenger cars and trucks; air, rail, and marine transportation; and farm and construction equipment.

² Consumption of coal, petroleum, natural gas, and wood for heat or electricity.

³ Adipic acid production (primarily for the manufacture of nylon fibers and plastics), and nitric acid production (primarily for fertilizers).

R=Revised.

Notes: • Emissions are from anthropogenic sources. "Anthropogenic" means produced as the result of human activities, including emissions from agricultural activity and domestic livestock. Emissions from natural sources, such as wetlands and wild animals, are not included. • Because of the continuing goal to improve estimation methods for greenhouse gases, data are frequently revised on an annual basis in

keeping with the latest findings of the international scientific community. • Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see <http://www.eia.gov/environment/>.

Sources: U.S. Energy Information Administration (EIA), *Emissions of Greenhouse Gases in the United States 2009* (March 2011), Table 22; and EIA estimates based on the Intergovernmental Panel on Climate Change's *Guidelines for National Greenhouse Gas Inventories* (2006 and revised 1996 guidelines)—see <http://www.ipcc-nccc.iges.or.jp/public/gl/invts6.html>; and the U.S. Environmental Protection Agency's *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2008* (April 2010)—see <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>.