Table 14. U.S. Methane Emissions from Anthropogenic Sources, 1990 and 1995-2003

Source	1990	1995	1996	1997	1998	1999	2000	2001	2002	P2003
Million Metric Tons Methane										
Energy Sources										
Coal Mining	4.25	3.66	3.19	3.50	3.28	3.12	2.98	2.96	2.81	2.87
Natural Gas Systems	5.60	5.98	6.00	6.27	6.26	6.27	6.57	6.39	6.69	6.69
Petroleum Systems	1.30	1.17	1.15	1.14	1.11	1.04	1.03	1.03	1.02	1.02
Stationary Combustion	0.56	0.58	0.58	0.44	0.39	0.42	0.44	0.41	0.36	0.36
Mobile Sources	0.24	0.22	0.22	0.22	0.21	0.21	0.20	0.20	0.20	0.19
Total Energy Sources	**11.96**	**11.62**	**11.14**	**11.57**	**11.25**	**11.06**	**11.22**	**10.99**	**11.08**	**11.13**
Waste Management										
Landfills	10.53	9.02	8.28	7.66	7.01	6.69	6.71	6.25	6.22	6.30
Wastewater Treatment	0.58	0.61	0.61	0.62	0.63	0.63	0.65	0.66	0.67	0.67
Total Waste Management	**11.11**	**9.63**	**8.90**	**8.28**	**7.64**	**7.32**	**7.36**	**6.91**	**6.89**	**6.97**
Agricultural Sources										
Enteric Fermentation	5.21	5.42	5.31	5.19	5.11	5.11	5.06	4.99	4.98	4.97
Animal Waste	1.93	2.35	2.34	2.48	2.51	2.46	2.46	2.49	2.50	2.52
Rice Cultivation	0.40	0.44	0.41	0.45	0.47	0.50	0.45	0.47	0.44	0.41
Crop Residue Burning	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Total Agricultural Sources	**7.60**	**8.26**	**8.11**	**8.18**	**8.13**	**8.11**	**8.02**	**8.00**	**7.97**	**7.95**
Industrial Processes	**0.12**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.11**	**0.11**	**0.11**
Total	**30.78**	**29.64**	**28.28**	**28.16**	**27.16**	**26.62**	**26.72**	**26.01**	**26.05**	**26.17**
Million Metric Tons Carbon Dioxide Equivalent										
Energy Sources										
Coal Mining	97.68	84.18	73.46	80.39	75.55	71.67	68.44	68.11	64.58	66.03
Natural Gas Systems	128.91	137.62	138.06	144.30	143.89	144.24	151.04	146.98	153.82	153.97
Petroleum Systems	29.87	26.93	26.36	26.33	25.54	24.03	23.79	23.71	23.48	23.46
Stationary Combustion	12.97	13.33	13.35	10.06	9.07	9.63	10.05	9.47	8.31	8.31
Mobile Sources	5.60	5.09	4.99	5.07	4.74	4.74	4.70	4.56	4.52	4.33
Total Energy Sources	**275.02**	**267.15**	**256.22**	**266.16**	**258.80**	**254.31**	**258.02**	**252.83**	**254.73**	**256.10**
Waste Management										
Landfills	242.16	207.52	190.52	176.16	161.28	153.88	154.27	143.81	143.14	144.93
Wastewater Treatment	13.27	13.98	14.11	14.25	14.38	14.51	15.01	15.15	15.34	15.47
Total Waste Management	**255.43**	**221.50**	**204.63**	**190.41**	**175.66**	**168.39**	**169.28**	**158.96**	**158.48**	**160.41**
Agricultural Sources										
Enteric Fermentation	119.87	124.67	122.21	119.45	117.44	117.42	116.40	114.80	114.58	114.28
Animal Waste	44.48	54.06	53.82	57.14	57.78	56.53	56.64	57.30	57.53	57.90
Rice Cultivation	9.30	10.22	9.42	10.32	10.71	11.47	10.24	10.73	10.23	9.53
Crop Residue Burning	1.04	0.97	1.12	1.12	1.14	1.10	1.15	1.12	1.07	1.12
Total Agricultural Sources	**174.69**	**189.92**	**186.57**	**188.04**	**187.07**	**186.52**	**184.42**	**183.95**	**183.41**	**182.83**
Industrial Processes	**2.70**	**3.04**	**3.08**	**3.09**	**3.05**	**3.07**	**2.93**	**2.59**	**2.58**	**2.58**
Total	**707.84**	**681.61**	**650.50**	**647.70**	**624.58**	**612.29**	**614.65**	**598.33**	**599.20**	**601.92**

P = preliminary data.

Notes: Data in this table are revised from the data contained in the previous EIA report, *Emissions of Greenhouse Gases in the United States 2002*, DOE/EIA-0573(2002) (Washington, DC, October 2003). Totals may not equal sum of components due to independent rounding.

Sources: EIA estimates presented in this chapter. Emissions calculations based on Intergovernmental Panel on Climate Change, *Greenhouse Gas Inventory Reference Manual: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, Vol. 3 (Paris, France, 1997), pp. 4.83-4.84, web site www.ipcc.ch/pub/guide.htm; and U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2002*, EPA-430-R-04-003 (Washington, DC, April 2004), web site http://yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenterPublicationsGHGEmissionsUSEmissionsInventory2004.html.