Emissions of Greenhouse Gases in the United States 2004

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Table 24. U.S. Methane Emissions from Industrial Processes, 1990 and 1996-2004

Source	1990	1996	1997	1998	1999	2000	2001	2002	2003	P2004
Thousand Metric Tons Carbon Dioxide Equivalent										
Chemical Production										
Ethylene	380	511	531	540	578	521	470	493	479	535
Ethylene Dichloride	58	79	84	82	91	82	78	78	83	101
Styrene	335	496	476	477	499	452	357	415	437	456
Methanol	174	245	267	262	254	203	142	137	132	123
Carbon Black	331	395	402	407	415	384	363	386	386	386
Total	**1,277**	**1,726**	**1,760**	**1,767**	**1,837**	**1,643**	**1,410**	**1,509**	**1,518**	**1,602**
Iron and Steel Production										
Coke[a]	251	193	172	163	148	155	130	132	132	132
Sinter	141	136	132	125	127	124	106	104	103	93
Pig Iron	1,028	1,023	1,027	998	958	991	872	833	841	875
Total	**1,420**	**1,352**	**1,330**	**1,286**	**1,233**	**1,271**	**1,108**	**1,068**	**1,077**	**1,100**
Total Industrial Processes	**2,697**	**3,078**	**3,090**	**3,053**	**3,070**	**2,914**	**2,518**	**2,577**	**2,594**	**2,702**
Thousand Metric Tons Methane										
Chemical Production										
Ethylene	17	22	23	23	25	23	20	21	21	23
Ethylene Dichloride	3	3	4	4	4	4	3	3	4	4
Styrene	15	22	21	21	22	20	16	18	19	20
Methanol	8	11	12	11	11	9	6	6	6	5
Carbon Black	14	17	17	18	18	17	16	17	17	17
Total	**56**	**75**	**77**	**77**	**80**	**71**	**61**	**66**	**66**	**70**
Iron and Steel Production										
Coke[a]	11	8	7	7	6	7	6	6	6	6
Sinter	6	6	6	5	6	5	5	5	4	4
Pig Iron	45	44	45	43	42	43	38	36	37	38
Total	**62**	**59**	**58**	**56**	**54**	**55**	**48**	**46**	**47**	**48**
Total Industrial Processes	**117**	**134**	**134**	**133**	**133**	**127**	**109**	**112**	**113**	**117**

[a]Based on total U.S. production of metallurgical coke, including non-iron and steel uses.

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 2003*, DOE/EIA-0573(2003) (Washington, DC, December 2004). Totals may not equal sum of components due to independent rounding.

Sources: American Iron and Steel Institute, *Annual Statistical Report* (Washington, DC, various years); American Chemical Council (formerly the Chemical Manufacturers Association), *U.S. Chemical Industry Statistical Handbook* (Washington, DC, various years); and Intergovernmental Panel on Climate Change, *Greenhouse Gas Inventory Reference Manual: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, Vol. 3 (Paris, France, 1997), p. 2.23, web site www.ipcc/pub/guide.htm.