

Table 13. U.S. Carbon Dioxide Emissions from Industrial Processes, 1990 and 1995-2003
 (Million Metric Tons Carbon Dioxide)

Source	1990	1995	1996	1997	1998	1999	2000	2001	2002	P2003
Cement Manufacture										
Clinker Production.....	32.6	36.1	36.3	37.6	38.4	39.2	40.4	40.5	42.0	42.3
Masonry Cement.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cement Kiln Dust	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Cement Subtotal	33.3	36.9	37.2	38.4	39.3	40.1	41.3	41.4	43.0	43.3
Other Industrial										
<i>Limestone Consumption</i>										
Lime Manufacture.....	12.4	14.5	15.1	15.5	15.8	15.5	15.4	14.8	14.1	14.3
Iron Smelting.....	1.7	1.2	1.1	1.1	1.1	1.0	1.1	1.0	0.9	0.9
Steelmaking	0.3	0.5	0.4	0.3	0.4	0.3	0.5	0.6	0.5	0.5
Copper Refining	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Glass Manufacture	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Flue Gas Desulfurization....	0.7	0.9	0.9	1.0	1.0	1.1	1.2	1.4	1.4	1.4
Dolomite Manufacture.....	0.5	0.2	0.3	0.3	0.3	0.1	0.3	0.3	0.3	0.3
Limestone Subtotal.....	15.9	17.8	18.3	18.5	18.9	18.3	18.7	18.4	17.4	17.6
Soda Ash Manufacture.....	3.4	3.8	3.8	3.9	3.8	3.7	3.6	3.6	3.5	3.6
<i>Soda Ash Consumption</i>										
Glass Manufacture	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Flue Gas Desulfurization....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
Sodium Silicate	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3
Sodium Tripolyphosphate....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Soda Ash Subtotal	0.5	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Carbon Dioxide Manufacture ..	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5
Aluminum Manufacture.....	5.9	4.9	5.2	5.3	5.4	5.5	5.4	3.9	4.0	4.0
Shale Oil Production.....	0.2	*	*	*	*	*	*	*	*	*
Other Industrial Subtotal ...	26.8	28.4	29.0	29.5	30.0	29.3	29.6	27.7	26.7	27.1
Total	60.1	65.3	66.1	67.9	69.3	69.4	70.9	69.2	69.7	70.3

*Less than 50,000 metric tons carbon equivalent.

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.