

Emissions of Greenhouse Gases in the United States 2009

**Table 16. U.S. carbon dioxide emissions from other sources, 1990-2009
 (million metric tons carbon dioxide)**

Fuel	1990	1995	2000	2003	2004	2005	2006	2007	2008	2009
Cement manufacture										
Clinker production	32.6	36.1	40.4	42.2	44.7	45.1	45.7	44.4	40.4	30.0
Masonry cement	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	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.6
<i>Cement manufacture subtotal</i>	<i>33.3</i>	<i>36.9</i>	<i>41.3</i>	<i>43.2</i>	<i>45.7</i>	<i>46.1</i>	<i>46.7</i>	<i>45.4</i>	<i>41.3</i>	<i>30.6</i>
Limestone consumption										
Lime manufacture	12.4	14.5	15.4	15.1	15.7	15.7	16.5	15.9	15.6	11.8
Iron smelting	1.7	1.2	1.1	0.9	1.0	0.8	0.9	0.8	0.8	0.4
Steelmaking	0.3	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.2
Copper refining	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Glass manufacture	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Flue gas desulfurization	0.7	0.9	1.2	1.3	1.4	1.5	1.5	1.5	1.5	1.5
Dolomite manufacture	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
<i>Limestone consumption subtotal</i>	<i>15.9</i>	<i>17.8</i>	<i>18.6</i>	<i>18.0</i>	<i>18.9</i>	<i>18.8</i>	<i>19.6</i>	<i>18.9</i>	<i>18.6</i>	<i>14.2</i>
Natural gas production										
Carbon dioxide in natural gas	14.0	16.7	18.3	18.6	18.4	18.1	18.7	19.5	20.5	21.2
Natural gas flaring	9.1	17.2	5.5	5.9	5.8	7.2	7.8	8.7	10.1	10.1
<i>Natural gas production subtotal</i>	<i>23.1</i>	<i>33.9</i>	<i>23.8</i>	<i>24.5</i>	<i>24.3</i>	<i>25.3</i>	<i>26.6</i>	<i>28.2</i>	<i>30.6</i>	<i>31.3</i>
Other										
Soda ash manufacture	3.4	3.8	3.6	3.6	3.8	3.9	3.9	4.0	4.1	3.5
Soda ash consumption	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	1.3	1.5	1.5	1.6	1.6	1.7	1.8	1.9
Aluminum manufacture	5.9	4.9	5.4	4.0	3.7	3.6	3.3	3.7	3.9	2.5
Shale oil production	0.2	*	*	*	*	*	*	*	*	*
Waste combustion	1.9	3.2	3.2	3.6	3.5	3.6	3.6	2.8	2.8	2.8
<i>Other subtotal</i>	<i>12.7</i>	<i>13.8</i>	<i>14.1</i>	<i>13.2</i>	<i>13.1</i>	<i>13.2</i>	<i>13.0</i>	<i>12.9</i>	<i>13.1</i>	<i>11.1</i>
Total	85.1	102.3	97.8	98.9	102.0	103.5	105.9	105.3	103.6	87.3

*Less than 0.05 million metric tons.

Note: Totals may not equal sum of components due to independent rounding.