

**Table A13. World carbon dioxide emissions from coal use by region, Reference case**

million metric tons of carbon dioxide

Region	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
<b>Americas</b>	<b>1,085</b>	<b>975</b>	<b>589</b>	<b>622</b>	<b>621</b>	<b>618</b>	<b>590</b>	<b>-2.2%</b>
United States	929	830	425	416	368	343	311	-3.8%
Canada	45	29	13	14	14	14	14	-4.2%
Mexico	19	19	30	34	35	35	36	2.4%
Brazil	57	60	61	65	72	68	69	0.6%
Other Americas	35	38	59	94	134	158	161	5.6%
<b>Europe and Eurasia</b>	<b>1,570</b>	<b>1,544</b>	<b>1,399</b>	<b>1,407</b>	<b>1,414</b>	<b>1,502</b>	<b>1,557</b>	<b>0.0%</b>
Western Europe	813	780	641	646	630	691	719	-0.4%
Russia	449	466	444	427	434	442	449	0.0%
Eastern Europe and Eurasia	308	298	314	334	351	369	389	0.8%
<b>Asia Pacific</b>	<b>12,719</b>	<b>12,653</b>	<b>13,355</b>	<b>13,638</b>	<b>13,513</b>	<b>13,456</b>	<b>13,530</b>	<b>0.2%</b>
Japan	409	402	287	289	278	267	257	-1.6%
South Korea	240	237	245	255	260	264	264	0.3%
Australia and New Zealand	145	134	153	165	166	168	169	0.6%
China	9,181	8,991	8,948	8,782	8,247	7,774	7,494	-0.7%
India	1,699	1,811	2,320	2,509	2,707	2,916	3,064	2.1%
Other Asia Pacific	1,045	1,078	1,402	1,637	1,854	2,067	2,282	2.8%
<b>Africa and Middle East</b>	<b>429</b>	<b>425</b>	<b>481</b>	<b>573</b>	<b>594</b>	<b>682</b>	<b>745</b>	<b>2.0%</b>
Africa	403	399	455	547	567	655	718	2.1%
Middle East	26	26	25	26	27	27	27	0.1%
<b>World</b>	<b>15,804</b>	<b>15,597</b>	<b>15,824</b>	<b>16,240</b>	<b>16,143</b>	<b>16,258</b>	<b>16,422</b>	<b>0.1%</b>

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run r\_230822.081459 and Annual Energy Outlook 2023 (March 2023), [www.eia.gov/aeo](http://www.eia.gov/aeo)

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