

**Table A12. World carbon dioxide emissions from natural gas 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>2,405</b>	<b>2,293</b>	<b>2,267</b>	<b>2,264</b>	<b>2,352</b>	<b>2,435</b>	<b>2,517</b>	<b>0.2%</b>
United States	1,724	1,580	1,515	1,482	1,529	1,571	1,607	-0.3%
Canada	231	242	231	240	259	279	301	0.9%
Mexico	147	155	173	183	201	210	218	1.4%
Brazil	72	81	95	89	82	79	79	0.3%
Other Americas	230	236	254	269	281	295	311	1.1%
<b>Europe and Eurasia</b>	<b>2,318</b>	<b>2,362</b>	<b>2,439</b>	<b>2,503</b>	<b>2,607</b>	<b>2,719</b>	<b>2,849</b>	<b>0.7%</b>
Western Europe	1,086	1,128	1,195	1,188	1,194	1,201	1,221	0.4%
Russia	931	918	935	994	1,051	1,108	1,166	0.8%
Eastern Europe and Eurasia	300	315	309	321	363	409	462	1.6%
<b>Asia Pacific</b>	<b>1,847</b>	<b>1,986</b>	<b>2,131</b>	<b>2,266</b>	<b>2,433</b>	<b>2,658</b>	<b>2,879</b>	<b>1.6%</b>
Japan	225	229	216	197	185	187	185	-0.7%
South Korea	137	135	130	125	122	121	123	-0.4%
Australia and New Zealand	91	91	94	92	92	97	101	0.4%
China	738	806	870	962	1,075	1,195	1,314	2.1%
India	137	159	213	273	334	397	458	4.4%
Other Asia Pacific	519	567	607	617	624	660	699	1.1%
<b>Africa and Middle East</b>	<b>1,517</b>	<b>1,582</b>	<b>1,664</b>	<b>1,783</b>	<b>1,901</b>	<b>2,021</b>	<b>2,137</b>	<b>1.2%</b>
Africa	331	339	362	393	432	471	514	1.6%
Middle East	1,186	1,243	1,302	1,390	1,469	1,550	1,623	1.1%
<b>World</b>	<b>8,087</b>	<b>8,223</b>	<b>8,501</b>	<b>8,815</b>	<b>9,294</b>	<b>9,833</b>	<b>10,382</b>	<b>0.9%</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/ao](http://www.eia.gov/ao)

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