

Table J2. World energy intensity by region, High Zero-carbon Technology Cost case

thousand British thermal units per 2015 dollar of GDP (PPP)

Region	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Americas	4.7	4.5	4.2	3.9	3.6	3.4	3.2	-1.3%
United States	4.8	4.6	4.2	3.8	3.5	3.2	3.0	-1.7%
Canada	8.2	7.8	7.4	7.1	7.0	6.9	6.8	-0.7%
Mexico	3.3	3.1	3.1	2.9	2.8	2.8	2.7	-0.6%
Brazil	4.7	4.7	4.4	4.4	4.3	4.3	4.3	-0.3%
Other Americas	3.8	3.6	3.4	3.2	3.0	2.9	2.7	-1.2%
Europe and Eurasia	4.1	4.0	3.7	3.6	3.4	3.3	3.2	-0.9%
Western Europe	3.2	3.1	3.0	2.8	2.7	2.6	2.6	-0.8%
Russia	8.9	8.5	8.1	8.1	8.0	7.9	7.9	-0.4%
Eastern Europe and Eurasia	7.3	6.7	5.6	4.8	4.2	3.8	3.4	-2.6%
Asia Pacific	5.0	4.6	4.0	3.6	3.3	3.0	2.8	-2.0%
Japan	3.5	3.4	3.0	2.9	2.8	2.8	2.7	-0.9%
South Korea	5.7	5.5	5.3	5.1	5.0	4.9	4.8	-0.6%
Australia and New Zealand	4.7	4.4	4.0	3.8	3.6	3.5	3.4	-1.2%
China	6.5	5.9	5.0	4.3	3.8	3.5	3.2	-2.5%
India	3.8	3.6	3.4	3.2	3.0	2.9	2.8	-1.1%
Other Asia Pacific	3.3	3.1	2.9	2.7	2.5	2.3	2.2	-1.4%
Africa and Middle East	4.9	4.8	4.4	4.2	4.1	4.0	4.0	-0.7%
Africa	3.4	3.4	3.3	3.2	3.1	3.2	3.1	-0.3%
Middle East	6.6	6.4	5.9	5.6	5.4	5.3	5.3	-0.8%
World	4.7	4.5	4.0	3.7	3.5	3.3	3.1	-1.5%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hz_230821.151430 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo; Oxford Economics, Global Economic Model (February 2023), www.oxfordeconomics.com (subscription site)

Note: Totals may not equal sum of components due to independent rounding. PPP=purchasing power parity.