

**Table J1. World carbon dioxide intensity of energy use by region, Low Economic Growth case**

metric tons per billion British thermal units

Region	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
<b>Americas</b>	<b>45.8</b>	<b>44.2</b>	<b>39.7</b>	<b>38.2</b>	<b>37.8</b>	<b>37.1</b>	<b>36.9</b>	<b>-0.8%</b>
United States	49.0	46.5	40.4	38.6	38.0	37.1	36.6	-1.0%
Canada	37.4	36.8	33.8	32.4	31.8	31.4	31.2	-0.6%
Mexico	54.1	54.9	52.3	51.0	51.2	50.6	49.7	-0.3%
Brazil	29.4	29.9	29.8	28.6	27.8	27.2	27.5	-0.2%
Other Americas	45.4	45.7	44.2	43.9	44.4	44.9	45.2	0.0%
<b>Europe and Eurasia</b>	<b>48.9</b>	<b>48.2</b>	<b>46.7</b>	<b>45.6</b>	<b>44.7</b>	<b>43.9</b>	<b>44.2</b>	<b>-0.4%</b>
Western Europe	45.2	44.3	42.3	40.8	39.3	38.0	38.4	-0.6%
Russia	54.1	54.3	53.8	53.3	52.9	52.8	52.7	-0.1%
Eastern Europe and Eurasia	60.3	58.9	57.5	57.2	57.8	57.9	57.8	-0.1%
<b>Asia Pacific</b>	<b>63.9</b>	<b>61.8</b>	<b>60.0</b>	<b>58.3</b>	<b>56.3</b>	<b>54.3</b>	<b>52.6</b>	<b>-0.7%</b>
Japan	55.9	54.9	50.9	48.4	47.0	46.2	45.4	-0.7%
South Korea	49.2	48.0	47.3	46.7	46.3	45.9	45.4	-0.3%
Australia and New Zealand	56.4	54.6	55.0	54.5	52.9	51.8	50.6	-0.4%
China	66.7	64.0	61.2	59.3	57.0	54.8	52.9	-0.8%
India	63.9	62.5	62.2	58.4	55.8	53.1	50.0	-0.9%
Other Asia Pacific	62.0	60.7	60.7	61.3	60.0	58.2	58.3	-0.2%
<b>Africa and Middle East</b>	<b>57.7</b>	<b>56.5</b>	<b>54.9</b>	<b>53.6</b>	<b>53.3</b>	<b>52.8</b>	<b>52.5</b>	<b>-0.3%</b>
Africa	54.8	53.2	51.6	49.9	49.8	49.2	49.1	-0.4%
Middle East	59.5	58.6	57.1	56.3	56.0	55.8	55.6	-0.2%
<b>World</b>	<b>55.9</b>	<b>54.5</b>	<b>52.3</b>	<b>50.9</b>	<b>49.7</b>	<b>48.4</b>	<b>47.6</b>	<b>-0.6%</b>

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run Im\_230821.151939 and Annual Energy Outlook 2023 (March 2023), [www.eia.gov/aeo](http://www.eia.gov/aeo); Oxford Economics, Global Economic Model (February 2023), [www.oxfordeconomics.com](http://www.oxfordeconomics.com) (subscription site)

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