

**Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions**  
U.S. Energy Information Administration | Short-Term Energy Outlook - April 2024

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
<b>Macroeconomic</b>															
Real Gross Domestic Product															
(billion chained 2017 dollars - SAAR)	<b>22,112</b>	<b>22,225</b>	<b>22,491</b>	<b>22,669</b>	<b>22,780</b>	<i>22,886</i>	<i>22,996</i>	<i>23,089</i>	<i>23,161</i>	<i>23,240</i>	<i>23,329</i>	<i>23,429</i>	<b>22,374</b>	<b>22,938</b>	<b>23,290</b>
Real Personal Consumption Expend.															
(billion chained 2017 dollars - SAAR)	<b>15,313</b>	<b>15,344</b>	<b>15,461</b>	<b>15,575</b>	<b>15,664</b>	<i>15,762</i>	<i>15,852</i>	<i>15,947</i>	<i>16,020</i>	<i>16,095</i>	<i>16,176</i>	<i>16,258</i>	<b>15,423</b>	<b>15,806</b>	<b>16,137</b>
Real Private Fixed Investment															
(billion chained 2017 dollars - SAAR)	<b>3,906</b>	<b>3,956</b>	<b>3,981</b>	<b>4,006</b>	<b>4,023</b>	<i>4,042</i>	<i>4,060</i>	<i>4,076</i>	<i>4,096</i>	<i>4,114</i>	<i>4,131</i>	<i>4,150</i>	<b>3,962</b>	<b>4,051</b>	<b>4,123</b>
Business Inventory Change															
(billion chained 2017 dollars - SAAR)	<b>24</b>	<b>19</b>	<b>102</b>	<b>85</b>	<b>94</b>	<i>92</i>	<i>110</i>	<i>111</i>	<i>107</i>	<i>98</i>	<i>96</i>	<i>93</i>	<b>57</b>	<b>102</b>	<b>98</b>
Real Government Expenditures															
(billion chained 2017 dollars - SAAR)	<b>3,759</b>	<b>3,790</b>	<b>3,843</b>	<b>3,883</b>	<b>3,896</b>	<i>3,905</i>	<i>3,909</i>	<i>3,913</i>	<i>3,916</i>	<i>3,921</i>	<i>3,925</i>	<i>3,928</i>	<b>3,819</b>	<b>3,906</b>	<b>3,923</b>
Real Exports of Goods & Services															
(billion chained 2017 dollars - SAAR)	<b>2,525</b>	<b>2,465</b>	<b>2,497</b>	<b>2,536</b>	<b>2,567</b>	<i>2,591</i>	<i>2,622</i>	<i>2,649</i>	<i>2,671</i>	<i>2,692</i>	<i>2,718</i>	<i>2,748</i>	<b>2,506</b>	<b>2,607</b>	<b>2,707</b>
Real Imports of Goods & Services															
(billion chained 2017 dollars - SAAR)	<b>3,460</b>	<b>3,393</b>	<b>3,428</b>	<b>3,451</b>	<b>3,502</b>	<i>3,550</i>	<i>3,605</i>	<i>3,663</i>	<i>3,713</i>	<i>3,751</i>	<i>3,790</i>	<i>3,825</i>	<b>3,433</b>	<b>3,580</b>	<b>3,770</b>
Real Disposable Personal Income															
(billion chained 2017 dollars - SAAR)	<b>16,663</b>	<b>16,797</b>	<b>16,820</b>	<b>16,911</b>	<b>17,016</b>	<i>17,174</i>	<i>17,312</i>	<i>17,443</i>	<i>17,587</i>	<i>17,719</i>	<i>17,840</i>	<i>17,955</i>	<b>16,798</b>	<b>17,236</b>	<b>17,775</b>
Non-Farm Employment															
(millions)	<b>155.0</b>	<b>155.8</b>	<b>156.4</b>	<b>157.1</b>	<b>157.8</b>	<i>158.2</i>	<i>158.5</i>	<i>158.6</i>	<i>158.6</i>	<i>158.7</i>	<i>158.7</i>	<i>158.7</i>	<b>156.1</b>	<b>158.3</b>	<b>158.7</b>
Civilian Unemployment Rate															
(percent)	<b>3.5</b>	<b>3.6</b>	<b>3.7</b>	<b>3.7</b>	<b>3.8</b>	<i>3.8</i>	<i>3.8</i>	<i>3.8</i>	<i>3.9</i>	<i>4.0</i>	<i>4.1</i>	<i>4.2</i>	<b>3.6</b>	<b>3.8</b>	<b>4.0</b>
Housing Starts															
(millions - SAAR)	<b>1.39</b>	<b>1.45</b>	<b>1.37</b>	<b>1.48</b>	<b>1.43</b>	<i>1.44</i>	<i>1.39</i>	<i>1.36</i>	<i>1.34</i>	<i>1.32</i>	<i>1.31</i>	<i>1.30</i>	<b>1.42</b>	<b>1.41</b>	<b>1.32</b>
<b>Industrial Production Indices (Index, 2017=100)</b>															
Total Industrial Production	<b>102.6</b>	<b>102.8</b>	<b>103.2</b>	<b>102.7</b>	<b>102.4</b>	<i>102.8</i>	<i>102.9</i>	<i>103.0</i>	<i>103.1</i>	<i>103.2</i>	<i>103.5</i>	<i>103.8</i>	<b>102.8</b>	<b>102.8</b>	<b>103.4</b>
Manufacturing	<b>99.9</b>	<b>100.2</b>	<b>100.0</b>	<b>99.8</b>	<b>99.5</b>	<i>99.9</i>	<i>100.4</i>	<i>100.8</i>	<i>100.9</i>	<i>101.0</i>	<i>101.3</i>	<i>101.7</i>	<b>100.0</b>	<b>100.2</b>	<b>101.2</b>
Food	<b>105.1</b>	<b>103.6</b>	<b>101.6</b>	<b>102.4</b>	<b>101.9</b>	<i>102.8</i>	<i>103.4</i>	<i>103.8</i>	<i>104.3</i>	<i>104.7</i>	<i>105.2</i>	<i>105.7</i>	<b>103.2</b>	<b>103.0</b>	<b>104.9</b>
Paper	<b>87.8</b>	<b>86.6</b>	<b>86.7</b>	<b>88.0</b>	<b>86.6</b>	<i>86.4</i>	<i>86.9</i>	<i>87.3</i>	<i>87.5</i>	<i>87.7</i>	<i>87.8</i>	<i>88.1</i>	<b>87.3</b>	<b>86.8</b>	<b>87.8</b>
Petroleum and Coal Products	<b>88.5</b>	<b>89.9</b>	<b>91.3</b>	<b>92.9</b>	<b>90.8</b>	<i>93.5</i>	<i>93.9</i>	<i>93.7</i>	<i>93.4</i>	<i>93.1</i>	<i>92.8</i>	<i>92.7</i>	<b>90.7</b>	<b>93.0</b>	<b>93.0</b>
Chemicals	<b>103.2</b>	<b>103.8</b>	<b>103.5</b>	<b>103.0</b>	<b>102.9</b>	<i>103.4</i>	<i>104.5</i>	<i>105.2</i>	<i>105.9</i>	<i>106.6</i>	<i>107.2</i>	<i>108.0</i>	<b>103.4</b>	<b>104.0</b>	<b>106.9</b>
Nonmetallic Mineral Products	<b>111.4</b>	<b>108.6</b>	<b>107.4</b>	<b>107.4</b>	<b>104.6</b>	<i>106.9</i>	<i>107.7</i>	<i>108.4</i>	<i>109.2</i>	<i>110.1</i>	<i>110.8</i>	<i>111.6</i>	<b>108.7</b>	<b>106.9</b>	<b>110.4</b>
Primary Metals	<b>92.7</b>	<b>95.7</b>	<b>94.8</b>	<b>93.8</b>	<b>92.9</b>	<i>94.7</i>	<i>97.0</i>	<i>98.1</i>	<i>98.4</i>	<i>99.1</i>	<i>99.8</i>	<i>101.2</i>	<b>94.3</b>	<b>95.7</b>	<b>99.6</b>
Coal-weighted Manufacturing (a)	<b>95.7</b>	<b>96.2</b>	<b>96.0</b>	<b>96.0</b>	<b>94.6</b>	<i>96.3</i>	<i>97.6</i>	<i>98.1</i>	<i>98.4</i>	<i>98.9</i>	<i>99.2</i>	<i>99.9</i>	<b>96.0</b>	<b>96.6</b>	<b>99.1</b>
Distillate-weighted Manufacturing (a)	<b>99.3</b>	<b>99.1</b>	<b>98.7</b>	<b>98.9</b>	<b>97.8</b>	<i>99.3</i>	<i>100.1</i>	<i>100.6</i>	<i>101.0</i>	<i>101.4</i>	<i>101.8</i>	<i>102.4</i>	<b>99.0</b>	<b>99.4</b>	<b>101.7</b>
Electricity-weighted Manufacturing (a)	<b>96.4</b>	<b>96.8</b>	<b>96.9</b>	<b>96.8</b>	<b>96.2</b>	<i>97.5</i>	<i>98.6</i>	<i>99.2</i>	<i>99.5</i>	<i>100.0</i>	<i>100.4</i>	<i>101.1</i>	<b>96.7</b>	<b>97.9</b>	<b>100.3</b>
Natural Gas-weighted Manufacturing (a)	<b>94.0</b>	<b>94.1</b>	<b>94.5</b>	<b>94.6</b>	<b>93.8</b>	<i>95.1</i>	<i>96.2</i>	<i>96.6</i>	<i>96.8</i>	<i>97.1</i>	<i>97.3</i>	<i>97.9</i>	<b>94.3</b>	<b>95.4</b>	<b>97.3</b>
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers)															
(index, 1982=1984=1.00)	<b>3.01</b>	<b>3.03</b>	<b>3.06</b>	<b>3.08</b>	<b>3.11</b>	<i>3.12</i>	<i>3.14</i>	<i>3.16</i>	<i>3.17</i>	<i>3.19</i>	<i>3.20</i>	<i>3.22</i>	<b>3.05</b>	<b>3.13</b>	<b>3.19</b>
Producer Price Index: All Commodities															
(index, 1982=1.00)	<b>2.59</b>	<b>2.54</b>	<b>2.57</b>	<b>2.55</b>	<b>2.51</b>	<i>2.48</i>	<i>2.48</i>	<i>2.50</i>	<i>2.51</i>	<i>2.50</i>	<i>2.50</i>	<i>2.51</i>	<b>2.56</b>	<b>2.49</b>	<b>2.50</b>
Producer Price Index: Petroleum															
(index, 1982=1.00)	<b>3.09</b>	<b>2.91</b>	<b>3.17</b>	<b>2.82</b>	<b>2.59</b>	<i>2.81</i>	<i>2.88</i>	<i>2.77</i>	<i>2.74</i>	<i>2.79</i>	<i>2.83</i>	<i>2.70</i>	<b>3.00</b>	<b>2.76</b>	<b>2.76</b>
GDP Implicit Price Deflator															
(index, 2017=100)	<b>121.3</b>	<b>121.8</b>	<b>122.8</b>	<b>123.3</b>	<b>124.1</b>	<i>124.7</i>	<i>125.3</i>	<i>126.1</i>	<i>127.0</i>	<i>127.7</i>	<i>128.4</i>	<i>129.2</i>	<b>122.3</b>	<b>125.1</b>	<b>128.1</b>
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b)															
(million miles/day)	<b>8,427</b>	<b>9,159</b>	<b>9,335</b>	<b>8,837</b>	<b>8,481</b>	<i>9,367</i>	<i>9,523</i>	<i>8,887</i>	<i>8,598</i>	<i>9,442</i>	<i>9,578</i>	<i>8,933</i>	<b>8,942</b>	<b>9,065</b>	<b>9,140</b>
Raw Steel Production															
(million short tons per day)	<b>0.236</b>	<b>0.244</b>	<b>0.245</b>	<b>0.242</b>	<b>0.244</b>	<i>0.255</i>	<i>0.263</i>	<i>0.258</i>	<i>0.259</i>	<i>0.271</i>	<i>0.274</i>	<i>0.269</i>	<b>0.242</b>	<b>0.255</b>	<b>0.269</b>
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum	<b>550</b>	<b>565</b>	<b>572</b>	<b>573</b>	<b>560</b>	<i>572</i>	<i>574</i>	<i>571</i>	<i>556</i>	<i>568</i>	<i>571</i>	<i>569</i>	<b>2,259</b>	<b>2,277</b>	<b>2,263</b>
Natural Gas	<b>501</b>	<b>383</b>	<b>416</b>	<b>456</b>	<b>511</b>	<i>385</i>	<i>419</i>	<i>460</i>	<i>509</i>	<i>379</i>	<i>411</i>	<i>458</i>	<b>1,756</b>	<b>1,775</b>	<b>1,757</b>
Coal	<b>187</b>	<b>168</b>	<b>241</b>	<b>186</b>	<b>165</b>	<i>156</i>	<i>225</i>	<i>172</i>	<i>171</i>	<i>149</i>	<i>226</i>	<i>161</i>	<b>781</b>	<b>718</b>	<b>707</b>
Total Energy (c)	<b>1,240</b>	<b>1,118</b>	<b>1,232</b>	<b>1,217</b>	<b>1,239</b>	<i>1,116</i>	<i>1,221</i>	<i>1,205</i>	<i>1,239</i>	<i>1,098</i>	<i>1,211</i>	<i>1,190</i>	<b>4,807</b>	<b>4,781</b>	<b>4,738</b>

(a) Fuel share weights of individual sector indices based on EIA *Manufacturing Energy Consumption Survey*.

(b) Total highway travel includes gasoline and diesel fuel vehicles.

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

- = no data available

SAAR = Seasonally-adjusted annual rate

Notes: EIA completed modeling and analysis for this report on April 4, 2024.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration.

Minor discrepancies with published historical data are due to independent rounding.

**Forecasts:** EIA Short-Term Integrated Forecasting System. U.S. macroeconomic forecasts are based on the S&P Global model of the U.S. Economy.