

Table G1. World petroleum and other liquid fuels production, High Oil Price case

million barrels per day

| Liquid fuel | 2022 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | Average annual percentage change, 2022–2050 |
|--------------------|------|-------|-------|-------|-------|-------|-------|---|
| Crude oil | 79.6 | 78.2 | 78.8 | 79.8 | 81.7 | 84.6 | 88.2 | 0.4% |
| Other liquid fuels | 19.4 | 23.7 | 24.1 | 24.8 | 25.4 | 25.8 | 25.5 | 1.0% |
| Total liquid fuels | 99.0 | 101.9 | 102.9 | 104.6 | 107.0 | 110.4 | 113.7 | 0.5% |

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hp_230822.081357 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

Note: Totals may not equal sum of components due to independent rounding. Crude oil includes crude oil and lease and plant condensate. Other liquid fuels includes natural gas plant liquids, liquid fuels from renewable sources, liquids from coal, liquids from natural gas, refinery gain, and other components.

Table G2. World crude oil production by region and country, High Oil Price case

million barrels per day

| Region and country | 2022 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | Average annual percentage change, 2022–2050 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
| OPEC | | | | | | | | |
| Middle East | 24.2 | 15.7 | 10.7 | 12.6 | 15.4 | 19.4 | 25.1 | 0.1% |
| North Africa | 2.2 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 0.4% |
| West Africa | 3.0 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 0.2% |
| Venezuela | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | -0.2% |
| Total OPEC | 30.2 | 22.2 | 17.2 | 19.1 | 21.8 | 25.8 | 31.5 | 0.2% |
| Non-OPEC | | | | | | | | |
| Americas | | | | | | | | |
| United States | 11.8 | 16.1 | 21.1 | 20.6 | 19.7 | 17.4 | 14.7 | 0.8% |
| Canada | 4.5 | 5.2 | 5.3 | 5.3 | 5.3 | 5.3 | 5.2 | 0.5% |
| Mexico | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 0.1% |
| Brazil | 3.0 | 3.2 | 3.1 | 2.9 | 3.0 | 3.8 | 4.5 | 1.5% |
| Other Non-OPEC Americas | 2.2 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | -0.3% |
| Europe and Eurasia | | | | | | | | |
| Western Europe | 2.9 | 3.3 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 0.8% |
| Eastern Europe | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.1% |
| Russia | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 0.0% |
| Eurasia | 1.9 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 0.2% |
| Asia Pacific | | | | | | | | |
| Australia and New Zealand | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3% |
| Japan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8% |
| South Korea | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0% |
| China | 4.0 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 0.1% |
| India | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.2% |
| Other Non-OPEC Asia Pacific | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 0.0% |
| Africa and Middle East | | | | | | | | |
| Non-OPEC Africa | 1.0 | 1.2 | 1.5 | 1.4 | 1.7 | 2.1 | 2.2 | 2.7% |
| Non-OPEC Middle East | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 0.0% |
| Total Non-OPEC | 49.4 | 56.0 | 61.6 | 60.8 | 59.9 | 58.8 | 56.7 | 0.5% |
| Total World | 79.6 | 78.2 | 78.8 | 79.8 | 81.7 | 84.6 | 88.2 | 0.4% |

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hp_230822.081357 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

Note: Totals may not equal sum of components due to independent rounding. "--" means not applicable. Crude oil includes crude oil and lease and plant condensate.

OPEC Middle East: Iran, Iraq, Kuwait, Saudi Arabia, and United Arab Emirates.

OPEC North Africa: Algeria and Libya.

OPEC West Africa: Angola, Congo, Equatorial Guinea, Gabon, and Nigeria.

Table G3. World Other liquid fuels production, High Oil Price case

million barrels per day

| Liquid fuel | 2022 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | Average annual percentage change, 2022–2050 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
| Natural gas plant liquid fuels | 11.8 | 12.6 | 13.4 | 14.0 | 14.6 | 15.1 | 15.8 | 1.0% |
| Liquid fuels from renewable sources | 2.6 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 0.5% |
| Liquid fuels from coal | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 1.5% |
| Liquid fuels from Natural gas | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0% |
| Refinery gain | 4.0 | 4.8 | 4.7 | 4.6 | 4.7 | 4.9 | 5.1 | 0.9% |
| Other liquid fuels | 2.5 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | -0.5% |
| Refinery balance | -2.0 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | -1.1 | -- |
| Total liquid fuels | 19.4 | 23.7 | 24.1 | 24.8 | 25.4 | 25.8 | 25.5 | 1.0% |

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hp_230822.081357 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

Note: Totals may not equal sum of components due to independent rounding. "--" means not applicable. Other liquid fuels includes still gas and methanol production. Refinery balance reports the overproduction or underproduction of liquid fuels from refineries in a specific year relative to the total demand for refined products.