

Table G1. World petroleum and other liquids production, Reference case

million barrels per day

Liquid fuel								Average annual percentage change, 2020–2050
	2020	2025	2030	2035	2040	2045	2050	
Crude oil	76.1	83.6	85.9	89.2	92.4	96.1	99.3	0.9
Other liquid fuels	17.9	22.1	23.3	24.0	24.9	25.8	26.6	1.3
Total liquid fuels	94.0	105.7	109.2	113.2	117.3	121.8	125.9	1.0

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run r_210719.163829; and EIA, *Annual Energy Outlook 2021* , (February 2021), www.eia.gov/aeo

Notes:

- * 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, liquids 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, Reference case

million barrels per day

Region and country	2020	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2020–2050
								2020–2050
OPEC								
OPEC Middle East	21.9	25.0	28.1	29.6	31.2	32.8	35.1	1.6
OPEC North Africa	1.5	2.1	2.1	2.2	2.5	2.6	2.8	2.0
OPEC Central and West Africa	3.6	4.0	4.3	3.6	2.4	2.1	2.3	-1.5
OPEC South America	0.5	0.5	0.7	1.1	1.4	1.7	1.7	3.9
Total OPEC	27.6	31.7	35.2	36.5	37.5	39.2	41.9	1.4
Non-OPEC								
OECD								
United States	11.3	13.2	13.8	13.8	13.2	13.2	12.9	0.4
Mexico	1.7	1.5	1.5	1.6	1.8	2.3	2.6	1.4
Canada	4.2	4.8	4.7	5.4	6.3	6.7	6.9	1.7
Other OECD Americas	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.0
OECD Europe	3.0	3.0	2.4	2.1	2.0	1.5	0.8	-4.4
Australia and New Zealand	0.4	0.3	0.2	0.1	0.1	0.3	0.4	0.3
Other OECD Asia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.7
Non-OECD								
Russia	9.9	10.5	10.2	10.9	11.7	12.2	12.6	0.8
Caspian Area	2.1	2.1	1.9	2.3	2.8	3.2	4.0	2.2
Other non-OECD Europe and Eurasia	0.9	0.8	0.8	0.8	0.8	0.8	0.8	-0.5
China	3.9	3.8	3.7	4.2	4.5	4.4	4.3	0.4
India	0.6	0.5	0.5	0.6	0.7	0.6	0.6	0.0
Other non-OECD Asia	1.8	1.9	2.1	1.8	1.3	0.7	0.8	-2.8
Oman	0.9	0.9	0.7	0.9	1.0	1.1	1.2	0.8
Other Middle East	1.6	1.7	1.8	1.8	1.8	1.8	1.8	0.4
Non-OPEC Africa	1.3	1.1	0.9	1.0	1.2	1.2	1.1	-0.5
Brazil	2.9	3.6	3.5	3.4	3.7	4.2	4.1	1.1
Other non-OECD Americas	1.2	1.4	1.3	1.2	1.5	1.9	1.8	1.2
Total Non-OPEC	48.6	51.9	50.7	52.7	54.9	56.9	57.4	0.6
Total World	76.1	83.6	85.9	89.2	92.4	96.1	99.3	0.9

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run r_210719.163829; and EIA, *Annual Energy Outlook 2021*, (February 2021), www.eia.gov/aeo

Notes:

- * Totals may not equal sum of components due to independent rounding.
- * *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 Central and West Africa: Angola, Congo, Equatorial Guinea, Gabon, and Nigeria.
- * OPEC South America: Ecuador and Venezuela.
- * Caspian Area: Afghanistan, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.

Table G3. World other liquid fuels production, Reference case

million barrels per day

Liquid fuel	2020	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2020–2050
Natural gas plant liquid fuels	11.8	14.5	15.4	15.8	16.6	17.2	17.9	1.4
Liquid fuels from renewable sources	2.5	3.3	3.6	3.6	3.6	3.7	3.8	1.4
Liquid fuels from coal	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.2
Liquid fuels from natural gas	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Refinery gain	2.5	2.9	3.0	3.1	3.2	3.4	3.5	1.1
Other liquid fuels	0.5	0.8	0.8	0.8	0.8	0.8	0.8	1.3
Total liquid fuels	17.9	22.1	23.3	24.0	24.9	25.8	26.6	1.3

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run r_210719.163829; and EIA, *Annual Energy Outlook 2021*, (February 2021), www.eia.gov/aeo

Notes:

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

* *Other liquid fuels* includes natural gas plant liquids, liquids from renewable sources, liquids from coal, liquids from natural gas, refinery gain, and other components.