

Table 7.1. Installed generating capacity by fuel type: Africa South, Maximum Off-Grid case

gigawatts

fuel	2019	2025	2030	2035	2040	2045	2050	Average annual percent change, 2019-2050
Liquids-fired	4.8	4.3	2.7	1.6	0.9	0.6	0.6	-6.3
Natural-gas-fired	17.8	14.5	16.4	22.7	32.3	39.7	44.6	3.0
Coal-fired	43.3	47.2	47.2	47.2	47.2	47.2	53.0	0.7
Nuclear	1.9	1.9	3.2	2.7	4.1	4.1	5.4	3.5
Renewables								
Biomass	1.0	1.5	1.6	1.7	2.1	2.1	2.2	2.8
Geothermal	0.7	2.6	5.2	6.7	8.8	9.3	9.3	8.9
Hydro	20.5	25.6	33.1	38.2	45.3	58.3	71.5	4.1
Solar	3.4	58.3	78.9	85.2	91.9	101.1	113.2	11.9
Waste	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Wind	2.1	10.6	17.4	18.2	18.4	18.8	18.8	7.4
Other renewables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total renewables	27.9	98.8	136.4	150.3	166.6	189.9	215.2	6.8
Total	95.6	166.5	205.9	224.5	251.1	281.4	319.0	4.0

Totals may not equal sum of components as a result of independent rounding.

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2020)

run: Max off-grid development

Table 7.2. Net electricity generation by fuel type: Africa South, Maximum Off-Grid case

billion kilowatthours

fuel	2019	2025	2030	2035	2040	2045	2050	Average annual percent change, 2019-2050
Liquids-fired	33.4	19.3	12.2	7.3	4.1	2.9	2.9	-7.6
Natural-gas-fired	57.1	46.5	52.5	72.8	103.8	127.3	143.2	3.0
Coal-fired	237.1	244.8	232.3	267.0	280.5	297.7	344.7	1.2
Nuclear	12.9	12.9	22.4	18.9	28.4	28.4	37.8	3.5
Renewables								
Biomass	0.0	1.2	2.4	3.1	3.5	3.6	5.4	infinity
Geothermal	4.8	19.1	38.3	49.8	65.0	69.4	69.4	9.0
Hydro	92.1	112.0	138.3	161.1	192.9	254.7	312.1	4.0
Solar	6.0	121.8	166.2	182.9	198.5	218.3	244.3	12.7
Waste	0.0	0.0	0.0	0.0	0.0	0.0	0.3	infinity
Wind	6.7	30.7	51.1	53.8	54.4	55.2	55.3	7.1
Other renewables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total renewables	109.5	284.7	396.2	450.8	514.2	601.3	686.9	6.1
Total	450.1	608.2	715.6	816.9	931.0	1057.7	1215.6	3.3

Totals may not equal sum of components as a result of independent rounding.

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2020)

run: Max off-grid development