Table 17.06-- ELECTRICITY GENERATION, BY SOURCE: 2008 TO 2021

Year	Total	Petroleum	Coal	Wind	Biomass 1/
	44.070.004	0.000.004	4 0 47 500	0.40,000	000.400
2008	11,376.384	8,669.934	1,647.592	240.023	302.423
2009	11,010.534	8,289.107	1,500.166	251.427	284.427
2010	10,836.036	8,087.337	1,545.513	261.120	283.474
2011	10,723.333	7,923.925	1,424.036	340.812	312.627
2012	10,469.268	7,482.760	1,537.340	378.234	280.976
2013	10,267.052	7,222.766	1,403.754	503.310	329.364
2014	10,204.158	6,925.919	1,511.184	578.617	334.030
2015	10,119.500	7,023.150	1,337.412	612.772	320.941
2016	9,948.846	6,640.316	1,497.380	639.127	359.466
2017	9,812.968	6,633.596	1,375.724	532.055	292.762
2018	9,796.773	6,748.947	1,311.203	601.934	305.513
2019	9,749.997	6,864.169	1,301.946	529.310	291.542
2020	9,079.019	6,149.205	1,165.147	592.238	256.221
2021	9,182.190	6,155.207	1,084.555	657.891	282.637
Year	Geothermal	Hydro	Other gases 2/	Solar	Others 3/
		-			
2008	234.333	84.343	38.572	0.018	159.146
2008 2009	234.333 167.591	84.343 112.649	38.572 22.345	0.018 1.390	159.146 381.432
2008 2009 2010	234.333 167.591 200.595	84.343 112.649 70.423	38.572 22.345 21.915	0.018 1.390 1.770	159.146 381.432 363.880
2008 2009 2010 2011	234.333 167.591 200.595 223.888	84.343 112.649 70.423 93.141	38.572 22.345 21.915 35.250	0.018 1.390 1.770 3.593	159.146 381.432 363.880 366.061
2008 2009 2010 2011 2012	234.333 167.591 200.595 223.888 260.997	84.343 112.649 70.423 93.141 114.581	38.572 22.345 21.915 35.250 47.036	0.018 1.390 1.770 3.593 4.608	159.146 381.432 363.880 366.061 362.736
2008 2009 2010 2011 2012 2013	234.333 167.591 200.595 223.888 260.997 274.841	84.343 112.649 70.423 93.141 114.581 78.295	38.572 22.345 21.915 35.250 47.036 41.330	0.018 1.390 1.770 3.593 4.608 19.466	159.146 381.432 363.880 366.061 362.736 393.927
2008 2009 2010 2011 2012 2013 2014	234.333 167.591 200.595 223.888 260.997 274.841 253.841	84.343 112.649 70.423 93.141 114.581 78.295 94.083	38.572 22.345 21.915 35.250 47.036 41.330 62.204	0.018 1.390 1.770 3.593 4.608 19.466 39.262	159.146 381.432 363.880 366.061 362.736 393.927 405.019
2008 2009 2010 2011 2012 2013 2014 2015	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163
2008 2009 2010 2011 2012 2013 2014 2015 2016	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102 322.592	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849 66.075	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006 52.022	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511 175.019	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089 363.123
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102 322.592 110.089	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849 66.075 96.520	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006 52.022 55.722	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511 175.019 184.576	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089 363.123 382.269
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102 322.592 110.089 (4/)	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849 66.075 96.520 94.542	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006 52.022	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511 175.019 184.576 268.138	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089 363.123 382.269 394.726
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102 322.592 110.089	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849 66.075 96.520	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006 52.022 55.722	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511 175.019 184.576	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089 363.123 382.269
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	234.333 167.591 200.595 223.888 260.997 274.841 253.841 230.340 260.102 322.592 110.089 (4/)	84.343 112.649 70.423 93.141 114.581 78.295 94.083 121.170 90.849 66.075 96.520 94.542	38.572 22.345 21.915 35.250 47.036 41.330 62.204 50.155 51.006 52.022 55.722 5.624	0.018 1.390 1.770 3.593 4.608 19.466 39.262 54.397 88.511 175.019 184.576 268.138	159.146 381.432 363.880 366.061 362.736 393.927 405.019 369.163 322.089 363.123 382.269 394.726

[Millions of kWh generated]

1/ Biomass includes biogenic municipal solid waste, other biomass liquid (biofuel), other biomass solids agricultural by-products, and wood and wood waste.

2/ Other gases include blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

3/ Others include other fuel, including but not limited to non-biogenic municipal solid waste and energy storage.

4/ In May 2018, the Puna Geothermal Venture facility shut down due to a volcanic eruption and reopened in October 2020. Residual fuel was used during the closure period.

Source: U.S. Department of Energy, Energy Information Administration, Form EIA-923 detailed data with previous form data (EIA-906/920)<https://www.eia.gov/electricity/data/eia923/> accessed June 26, 2023 and calculations by Hawaii State Department of Business, Economic Development and Tourism.