

**6.4.2 Electric Quad Average Carbon Dioxide Emissions with Average Utility Fuel Mix (Million Metric Tons) (1)**

	<u>Petroleum</u>	<u>Natural Gas</u>	<u>Coal</u>	<u>Nuclear</u>	<u>Renewable</u>	<u>Total</u>
2010	0.83	10.14	46.45	0.00	0.30	57.72
2011	0.00	0.21	0.00	0.00	0.00	0.21
2012	0.00	0.65	0.00	0.00	0.00	0.65
2013	0.00	0.16	0.00	0.00	0.00	0.16
2014	0.00	0.61	0.00	0.00	0.00	0.61
2015	0.00	1.04	0.00	0.00	0.00	1.04
2016	0.00	0.83	0.00	0.00	0.00	0.83
2017	0.00	0.58	0.00	0.00	0.00	0.58
2018	0.00	0.62	0.00	0.00	0.00	0.62
2019	0.00	0.70	0.00	0.00	0.00	0.70
2020	0.00	0.71	0.00	0.00	0.00	0.71
2021	0.00	0.76	0.00	0.00	0.00	0.76
2022	0.00	0.74	0.00	0.00	0.00	0.74
2023	0.00	0.60	0.00	0.00	0.00	0.60
2024	0.00	0.60	0.00	0.00	0.00	0.60
2025	0.00	0.43	0.00	0.00	0.00	0.43
2026	0.00	0.54	0.00	0.00	0.00	0.54
2027	0.00	0.63	0.00	0.00	0.00	0.63
2028	0.00	0.84	0.00	0.00	0.00	0.84
2029	0.00	1.05	0.00	0.00	0.00	1.05
2030	0.00	1.29	0.00	0.00	0.00	1.29
2031	0.00	1.46	0.08	0.00	0.00	1.54
2032	0.00	1.67	0.20	0.00	0.00	1.87
2033	0.00	1.82	0.38	0.00	0.00	2.20
2034	0.00	1.88	0.58	0.00	0.00	2.46
2035	0.00	1.88	0.76	0.00	0.00	2.65

Note(s): 1) This table provides estimates of the carbon emissions resulting from consumption of a primary quad at electric utilities. Projected (2011-2035) new marginal capacity emissions will result from natural gas- and coal-fired power plants. Electric generation capacity is projected to increase for biomass, wind, and nuclear power. Wind power, biomass, and hydroelectric power electric generation will increase 2010-2035. Nuclear electric generation capacity will increase 2014-2035. Electricity imports from utility consumption were ignored since this energy was produced outside of the U.S. "Average" means the weighted average of different fuels (e.g., petroleum is the average of residual and distillate fuel oils). The combustion of fossil fuels produces carbon in the form of carbon dioxide and carbon monoxide; however, carbon monoxide emissions oxidize in a relatively short time to form carbon dioxide. 2) Emissions from renewable energy include emissions released from geothermal power and non-biogenic emissions from municipal solid waste.

Source(s): EIA, Annual Energy Outlook 2012 Early Release, Jan. 2012, Table A2 and Table A18.